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Portugal at the Crossroads

By HOWARD LA FAY

Photographs by VOLKMAR WENTZEL

Both National Geographic Staff

AT DUSK, Lisbon's principal square, the Rossio, explodes into a rainbow of neon; shoppers eddy past glittering store windows; eager patrons press into overcrowded cafes and restaurants; music halls rock with song and merriment. Beneath gay mosaic sidewalks, trains of a new subway system slam from end to end of the Portuguese capital.

But beyond the lights and laughter and movement lie a city and a nation in crisis. For Portugal—earliest and once the greatest of Europe's modern imperial powers—has chosen to resist the tide of anticolonialism engulfing

Sons of the sea, the Portuguese became Europe's greatest navigators. Today's fishermen, such as these on a beach near Porto, still dare the oceans in frail vessels.

City of the ages, Lisbon meets the 20th century more than halfway. But ultramodern apartments of Portugal's capital show only one face of this hard-pressed little nation, scarcely larger than the State of Maine. In the 1400's Portugal became one of the world's chief maritime powers when her seafarers set sail into the Age of Discovery. Today she struggles to maintain the remnants of a once-global empire.

Tradition ascribes Lisbon's founding to the Greek wanderer Ulysses. Originally named Olisipo, the city stands, like Rome, on a series of hills. One in every 11 Portuguese lives here, many in apartments like these on Avenida dos Estados Unidos da América—a reminder of Portugal's long friendship with the U.S.A.

Lisbon's *varinas,* or fishwives, trudge cobbled streets of the Tagus riverfront, wearing shoes unwillingly but as the law requires. They carry headloads of seafood fresh from boats, charting through the city for customers.

Africa. At tremendous cost, the Portuguese army is battling guerrillas in Angola, Mozambique, and Guinea.

I found the crisis reflected in the special sales tax—15 percent on some items—that helps finance the faraway wars. I found it, too, in the myriad signs that sprinkle Lisbon: "Mozambique and Angola, Portuguese for Five Centuries"*... "Portugal Is Not for Sale." I saw it in patriotic demonstrations where out-of-step delegations—firemen with glinting axes on shoulders, women from

*See in NATIONAL GEOGRAPHIC: "Angola, Unknown Africa," September, 1961, and "Mozambique, Land of the Good People," August, 1964, both by Volkmar Wentzel.

KODACHROMES BY NATIONAL GEOGRAPHIC PHOTOGRAPHER JOHN WINSLOW, JARDIM, AND THOMAS NEBBIA (CITY AND PALACE) © N.G.S.

religious societies, farmers from the provinces—marched with banners proclaiming *Lutaremos Sempre*—"We Shall Fight Forever." And once again, in Africa, Portuguese are dying in their nation's 800-year struggle for identity, survival, empire.

Rebel Vassal Led Way to Independence

Forged from a petty duchy on the western strand of the Iberian Peninsula by Afonso Henriques, a rebellious vassal of the Spanish kingdom of Leon, Portugal gained independence in 1143. The tiny new state lay between the Minho and Mondego Rivers, but Afonso—who became Portugal's first king—fought his way south, annexing lands held by the Moors since the eighth century.

Intensely Christian from its very inception, Portugal wears on its coat of arms five blue shields, each with five bezants representing the five wounds of Christ. Traditionally, Portuguese monarchs wore no crown—it belonged to the Blessed Virgin.

In 1147, with the help of Crusaders bound for the Holy Land, Afonso captured the great port of Lisbon from the Moslems. His successors continued the southward advance and, with the final conquest of the Moorish kingdom of the Algarve in 1249, Portugal established borders that have remained virtually

unchanged to the present day (map, page 459). This land of more than nine million people is the oldest intact state in Europe.

Insulated from the rest of the continent by a powerful and oftimes hostile neighbor (Spain invaded Portugal repeatedly over the centuries, and once, from 1580 to 1640, even absorbed her), the Portuguese turned to the sea. The 15th-century caravels of Prince Henry the Navigator blazed the way into unknown oceans, and Portuguese mariners opened vast areas of the world to European exploration.* At its brilliant zenith, the empire won by the Portuguese stretched from the China Sea to Brazil, from North Africa to the southwest Pacific. Soldiers, missionaries, administrators, settlers poured into the new lands.

"In the 430 years since the discoveries," a Portuguese historian pointed out to me, "our principal export has been men—so much so that far more people of Portuguese descent live outside the country than in it. We literally turned our backs on Europe.

"After Vasco da Gama found the sea route to India in 1498, Portuguese ships monopolized the spice trade. But most of the profits—and most of our manpower—went into guarding the 15,000 miles of sea lanes between Goa and Lisbon. Even so, in one year alone we lost 500 ships to pirates.

"At home, farms and industries decayed. The government was forced to buy food and other necessities abroad. In the end, after mortgaging the country to the hilt, we flooded the spice market and prices plummeted.

"For the Portuguese," he laughed bitterly, "imperialism in the past has been a huge illusion. Do you know what it has brought us? The lowest per capita income in Western Europe and the highest rate of illiteracy.

"Today we face a crucial moment of our history. And no matter what happens—whether we hold the overseas territories or lose them—Portugal is rejoining Europe."

I knew what he meant. Although the Portuguese have left their mark around the globe, almost 500 years of overseas involvements all but exhausted the tiny nation's resources. Chronic misfortune abroad, climaxed by the loss of Goa in 1961, has now refocused Portuguese energies upon the underdeveloped homeland. Shaking off the economic stagnation of centuries, Portugal has embarked upon a belated industrial revolution.

On the upper Raloeiro River, a dam erected at a cost of $49,000,000 this year began feeding 90 million watts of electric power to the nation. Just outside Lisbon, one of the world's largest rotary kilns produces 1,850 tons of cement daily to support a massive building program. In the capital itself, workers scale steel towers 625 dizzy feet above the Tagus to build Europe's longest and most expensive suspension bridge (page 458).

Historically, the Tagus—flowing out of the heart of Spain to empty into the Atlantic—has sliced Portugal neatly in half. Ferryboats have provided a tenuous link between Lisbon

Monument to valor, the Monastery of Santa Maria da Vitória soars in Gothic splendor near Aljubarrota, where the Portuguese routed invading Castilians in 1385. Portuguese know it simply as Batalha—Battle. In the Royal Cloister of King João I, the monastery's donor, monks once washed at this gently plashing fountain.

Portugal's voyager-poet Luís de Camões rests in stone atop his tomb in Lisbon's Jeronimos Church, next to the tomb of Vasco da Gama. Camões's epic *Os Lusíadas* ("The Portuguese") completed some 30 years after da Gama found the sea route to India in 1498, immortalizes the nation's great period of discovery and colonization.

* See "Prince Henry, the Explorer Who Stayed Home," by Alan Villiers, GEOGRAPHIC, November, 1960.

EKTACHROME BY NATIONAL GEOGRAPHIC SOCIETY © N.G.S.

Swooping cables to support a 7,428-foot suspension bridge, longest in Europe, span the Tagus River estuary at Lisbon (background). Towers soar 628 feet; each cable contains 11,248 steel strands. Scheduled for completion in late 1966, the $875,000,000 four-lane highway bridge, eventually to carry rail traffic also, will provide Lisbon's first direct link with southern Portugal, opening the region to industry and tourism.

PORTUGAL

WESTERNMOST NATION of continental Europe, Portugal found her destiny in the sea. Five centuries ago, caravels bearing Portugal's scarlet Cross of Christ coursed the oceans, exploring and opening two-thirds of the then-unknown world. Now, from Brazil to Timor, 100 million people use the tongue of Europe's oldest intact nation.

Tiny Portugal is a world in miniature: Within hours one may ski in the piny north-central Serra da Estrela and swim on the sunny beaches of the Algarve.

GOVERNMENT: Constitutionally a republic; same prime minister since 1981. **AREA:** 35,510 square miles (including Azores and Madeira Islands); 808,570 square miles in overseas territories of Angola, Cape Verde Islands, Macao, Mozambique, Portuguese Guinea, Portuguese Timor, São Tomé and Príncipe. **POPULATION:** 9,150,000 (with Azores and Madeira Islands); 13,544,000 in overseas territories. Celtic influences in northern Portugal, Arab and Berber in the south. **LANGUAGE:** Portuguese. **RELIGION:** Mainly Roman Catholic. **ECONOMY:** 60 percent based on agriculture. One of the world's chief producers of olive oil, wine, and sardines. Leading producer of cork, exporting half the world's supply. Manufactures include textiles, pottery, chemicals, ships. **MAJOR CITIES:** Lisbon (population: 818,300), capital, port; Porto (population: 306,000), wine center, port. **CLIMATE:** Mild and temperate. Rainy winters and warm summers; interior and south, drier and hotter.

Overseas territories 23 times the size of the homeland fly the Portuguese flag today, from islands in the Atlantic and lands in Africa to Macao and Timor in far-off Asia.

and the undeveloped southern regions of the country, as have several bridges far upriver. But the new Tagus road-and-rail span promises to revolutionize the Portuguese economy.

It was raining when Engineer José do Canto Moniz, General Inspector of Public Works and Director of the Bridge Authority, received me in his office overlooking the river. Outside, I could see swarms of workers half obscured by driving rain, laboring to sink the world's deepest pier—a concrete footing that would extend 260 feet below the river's surface.

Bridge Will Unite a Sundered Land

"Studies on this bridge began in 1876," Engineer Moniz told me, "and its importance to Portugal's future cannot be overstated.

"For one thing, some nine percent of our population now lives in Lisbon proper, causing an acute housing shortage. By opening up the Tagus's southern shore, we can absorb some of this population in satellite towns.

"Furthermore," his finger stabbed a map, "heavy industry will be able to locate on the peninsula between Lisbon and Setúbal. These are our two busiest ports.

"Finally, the bridge will open the entire south to tourism. The Algarve, with its fine beaches and subtropical climate, will be only a four-hour drive from Lisbon."

Later I boarded a boat and bounced across the rain-lashed Tagus. Just above a temporary dock, workers were pouring concrete for the bridge's southern anchorage—a mammoth block designed to withstand some 28,000 tons of pull from the suspension cables.

A scene from the Apocalypse met my eyes. Workers, knee-deep in mud, slopped through the drenching rain, while machinery under stress clanked and groaned in wild cacophony. Trucks loaded with concrete skidded down a road gouged in the naked earth; they fed their cargo into the buckets of giant cranes that swooped overhead to dump ton after ton into the great cavity that would hold the anchorage. In shifting, swirling mist loomed the colossal statue of Christ the King that guards the river's southern bank. Almost filling the leaden sky, it stretched arms protectively above work and workers.

Despite the hectic industrialization of its outskirts, Lisbon remains a calm and classic capital. The present-day city is a monument to the Marquês de Pombal. On All Saints Day in 1755 a calamitous earthquake wrenched Lisbon, destroying two-thirds of the city. Subsequent seismic sea waves and widespread fires completed the carnage. Some 40,000 corpses lay in the ruins of the capital that Spanish poet Tirso de Molina had described as "the eighth wonder of the world."

Alone in the government, Pombal—who later assumed dictatorial power—kept his head. He issued the terse order, "Bury the dead and feed the living." Out of the rubble he built today's Lisbon of broad avenues and sweeping squares.

Pombal's statue now stands in the center of the city (pages 468-9), looking down the tree-lined length of Avenida da Liberdade—almost 100 yards wide and bounded by strips of garden where grave swans glide in ponds.

Lisbon, I found, is a city for idle strolling. Turn into the Rua da Madalena and enter the cool, aromatic herb shop Ervanária Rosil, where an expert will prescribe and mix infusions of medicinal herbs to combat rheumatism or laryngitis, obesity or eczema. Drop into the hushed Royal Coach Museum, where the faded plush and peeling gilt of the finest surviving collection of horse-drawn coaches recalls regal splendors and dead monarchs.

Or pass from the sun-drenched street into the vast gloom of the Jerónimos Church. Started by King Manuel the Fortunate in 1496, on the eve of Vasco da Gama's journey to the Indies, Jerónimos incorporates the full exuberance of the Age of Discovery. Here, frozen forever in stone, is the blazing noontide of empire. Stylized hawsers writhe in the arches. Shells and coral and fish entwine on every column. Sanctuary lamps glow red above carved African lions.

Those Who Dared All for Christendom

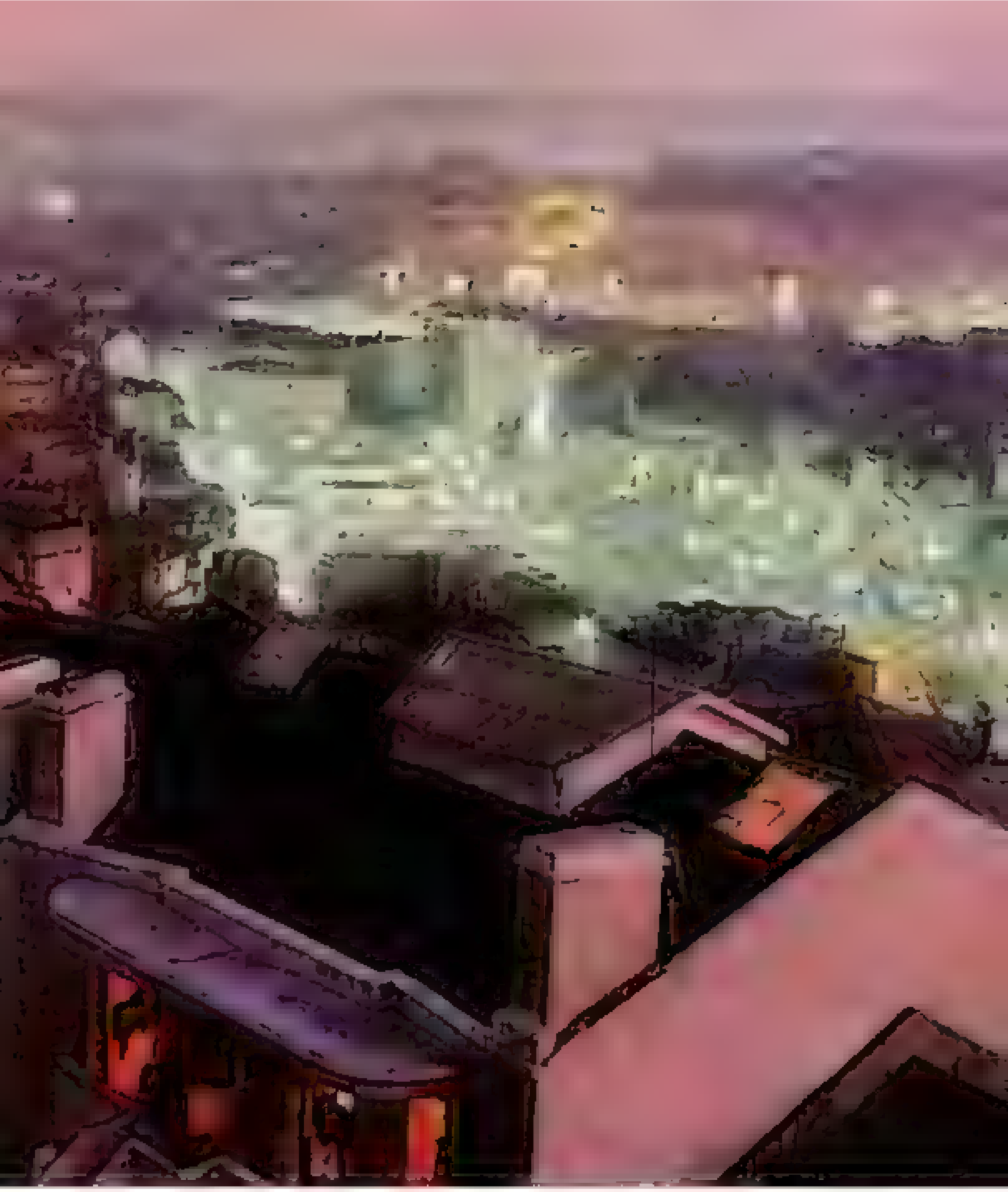
In a timeless dusk of flickering candles sleep the kings and queens who reaped the wealth of the East. Their stone catafalques rest on the backs of marble elephants. The tomb of Vasco da Gama, first to sail to India, lies next to that of Luís de Camões, Portugal's national poet, who himself voyaged to the Orient (page 456). "This small nation of Portugal," sang Camões, "does not lack those who will dare all for Christendom . . ."

At the dawn of that brilliant epoch, Portugal was indeed a small, poor land, with a population of barely a million and a half. And discovery exacted a fearful human toll. Of da Gama's men, a third never returned. When Alvares Cabral sailed to India in 1500, he lost 6 of his 13 ships. But the Portuguese

Jam-packed cable car clacks over steep cobbled streets, bringing Lisbonns downtown from Barro Alto, the High Quarter. Its multistoried 17th-century buildings were once the city's tallest.

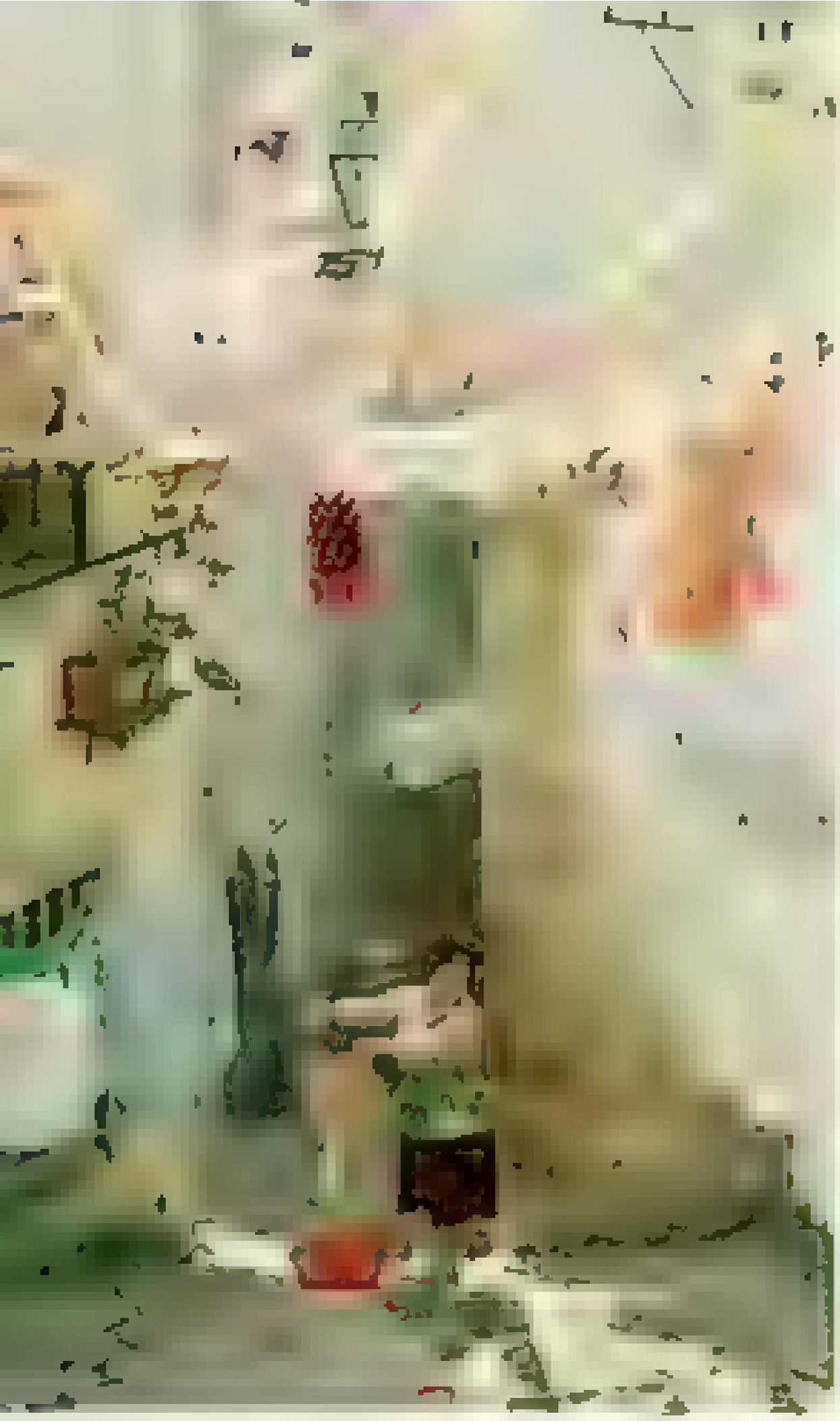
Explosion of colored paper festoons Lisbon's Alfama quarter for the Feast of St. Anthony, favorite saint of the city. Artful duck lamp will brighten the Moorish quarter at dusk.

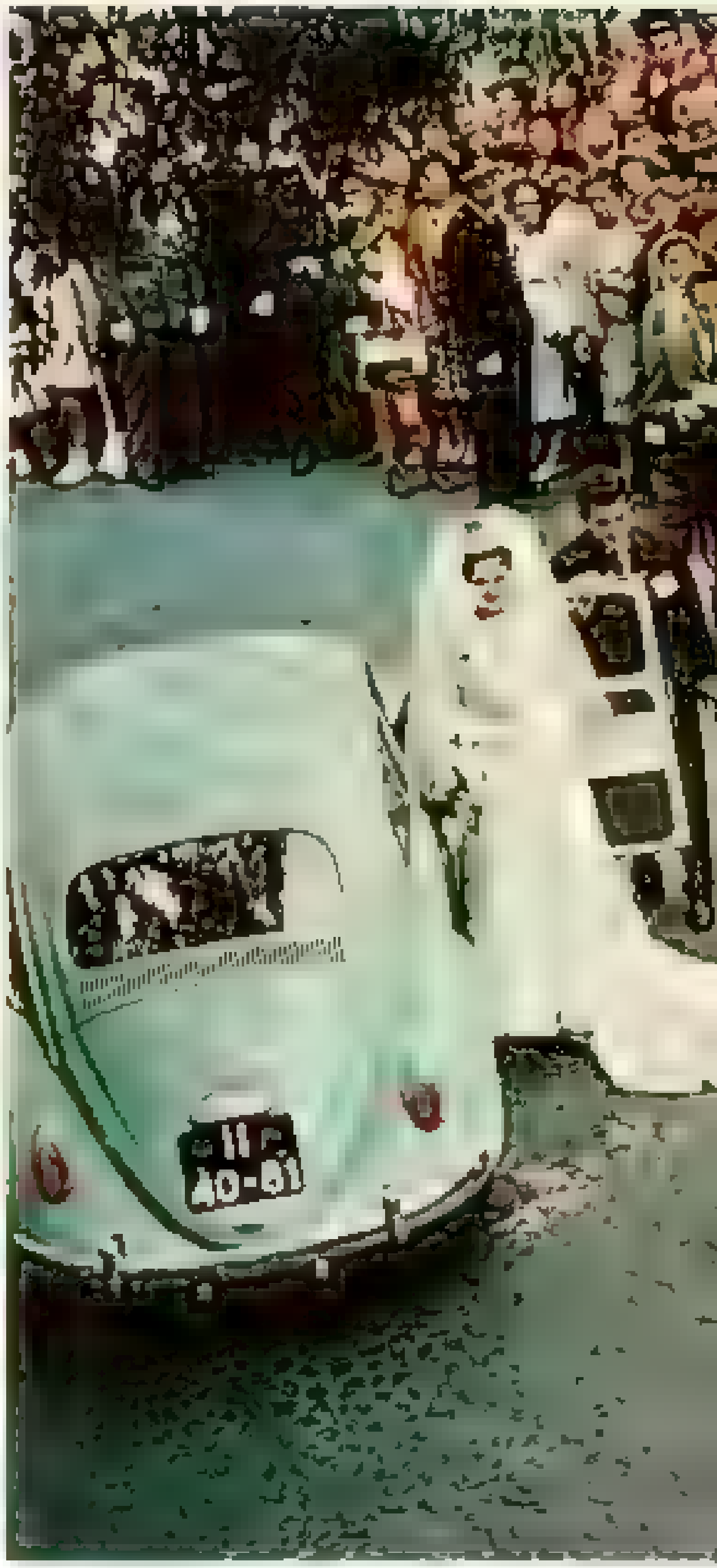
"Street of My Jealousies," sings a comely *fadista*, Valentina Felix, lamenting unrequited loves and lost lovers. Melancholy strains of the *fado*, Portugal's best-known song form, resound in late-at-night cabarets like this club in the fashionable seaside resort of Estoril, near Lisbon.

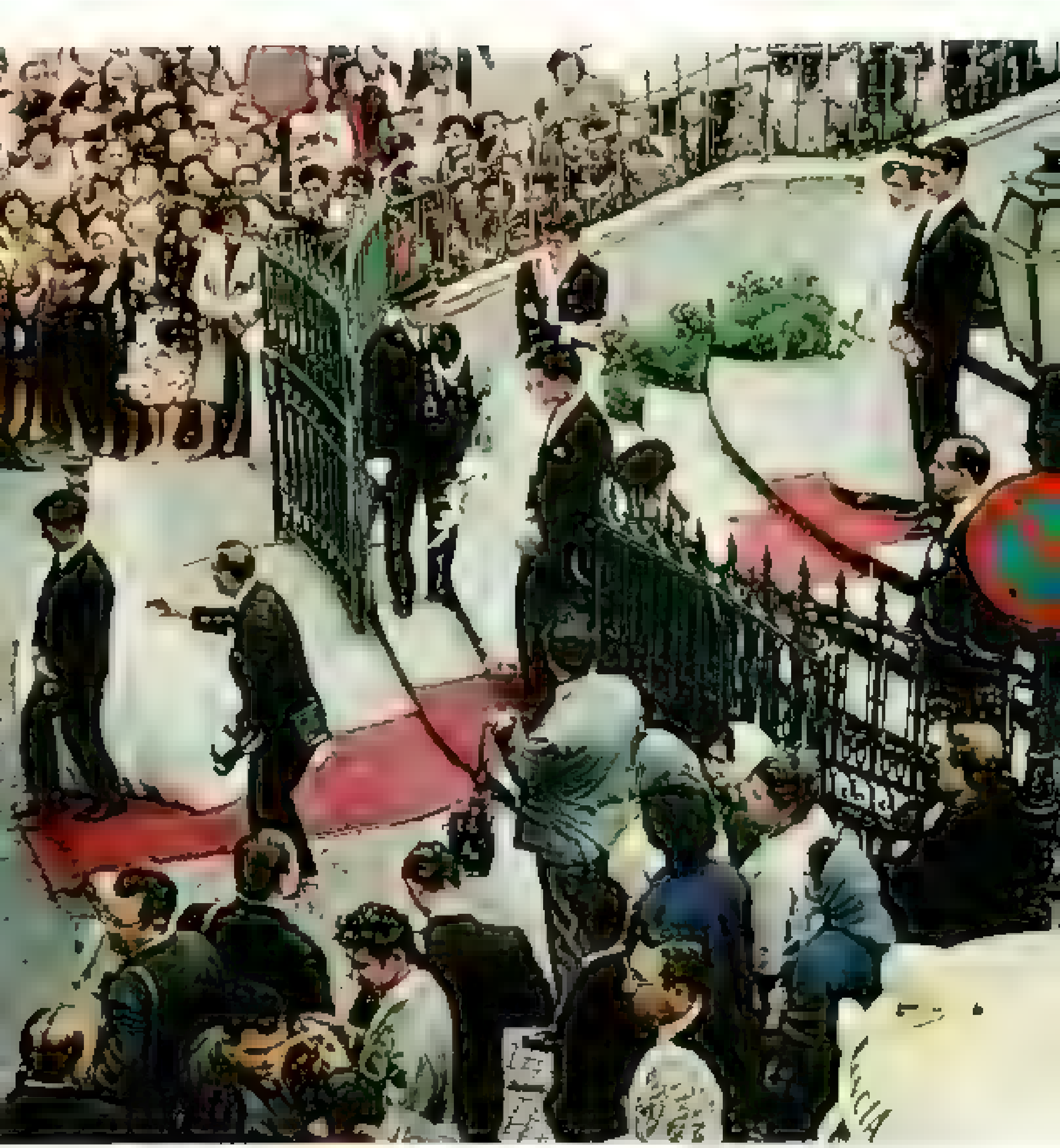


Mes[illegible]

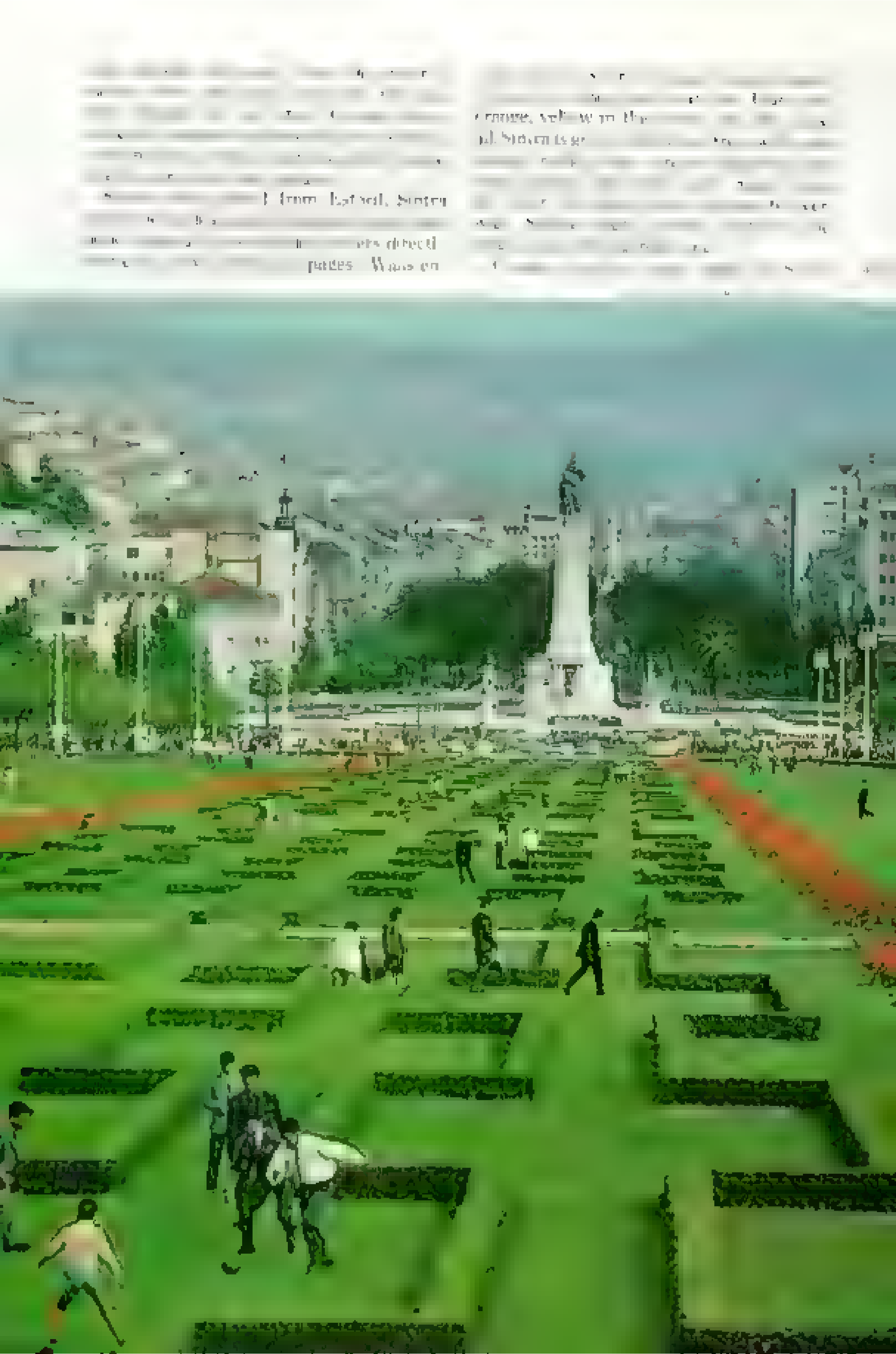

FRITAS
motores eléctricos

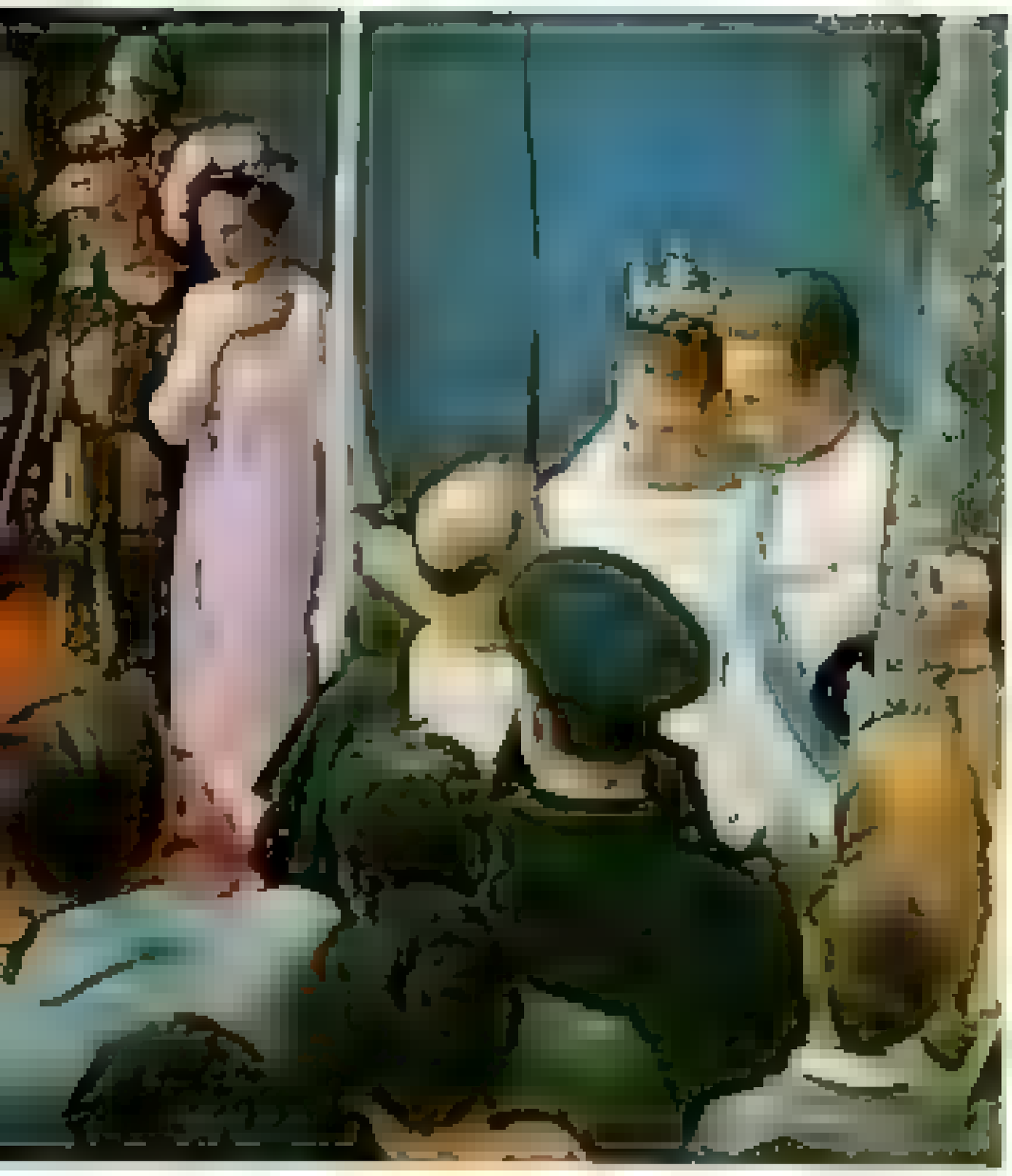


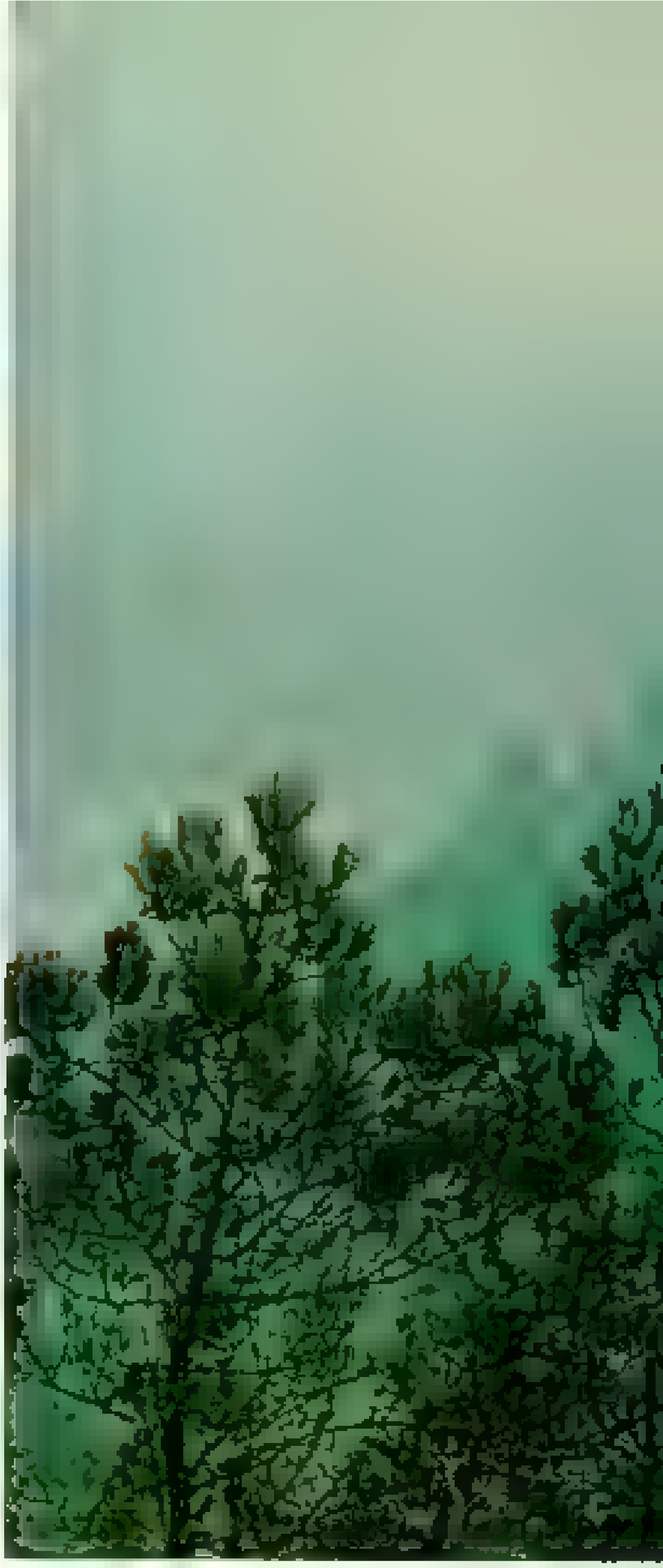


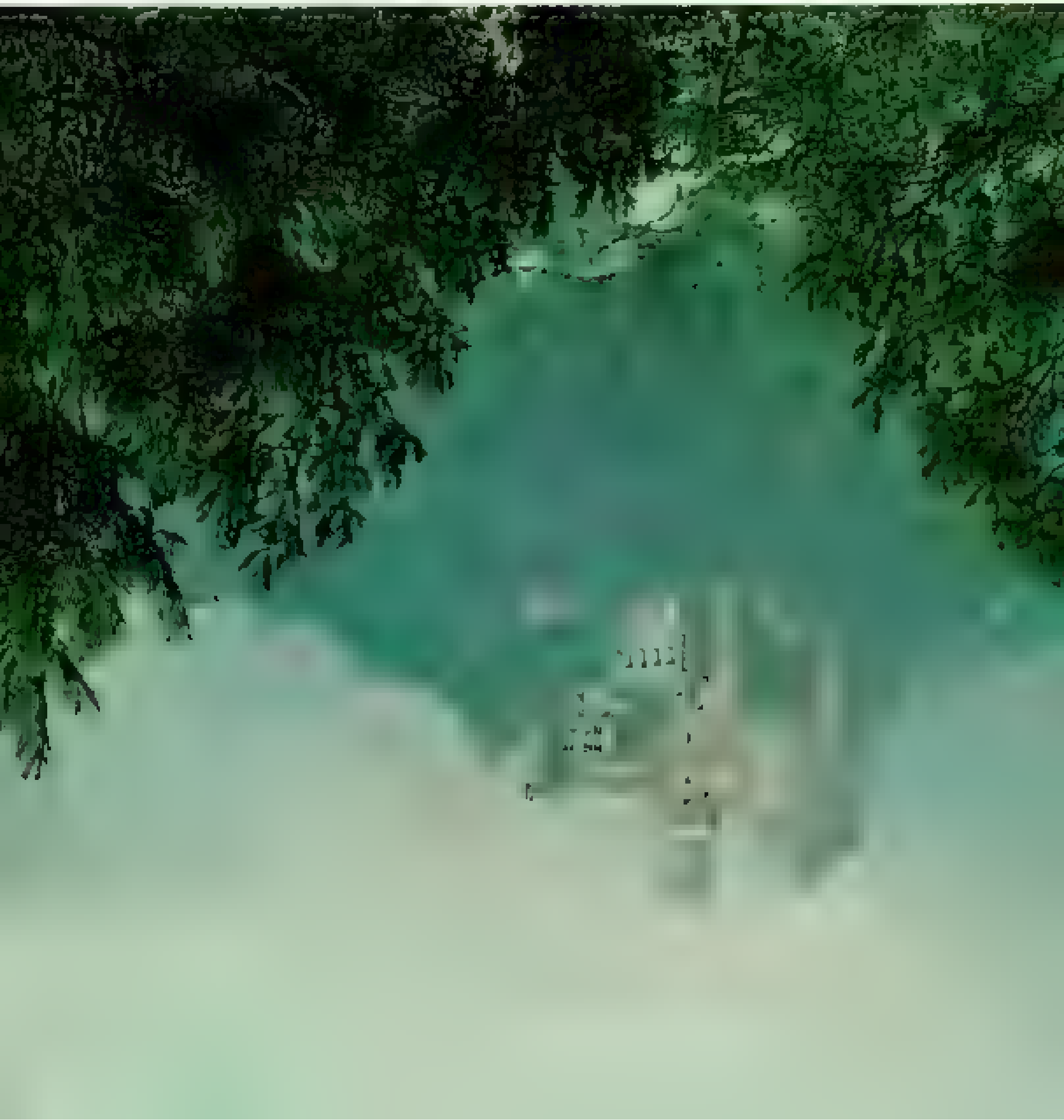


Prude Not But Preserves Paradise Art

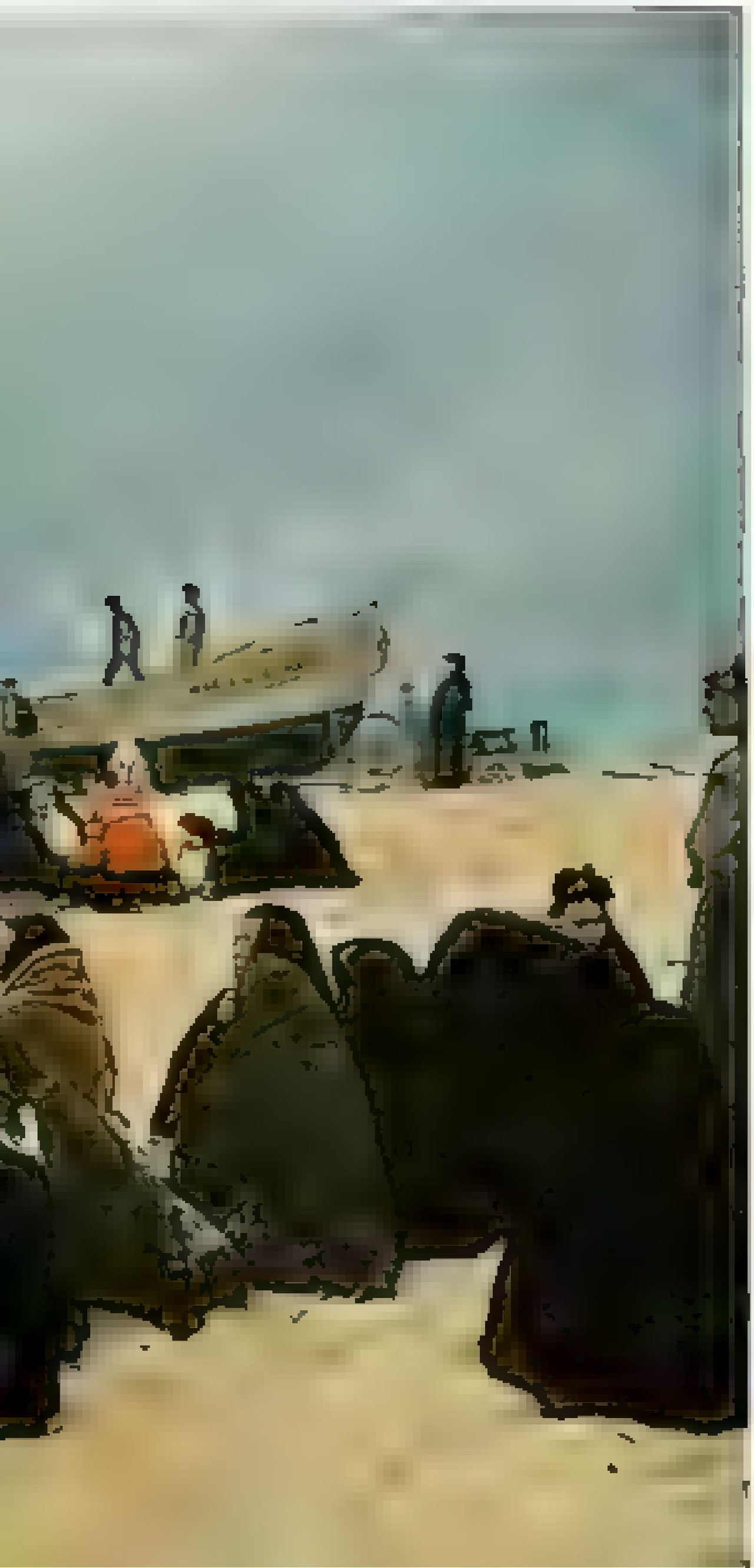






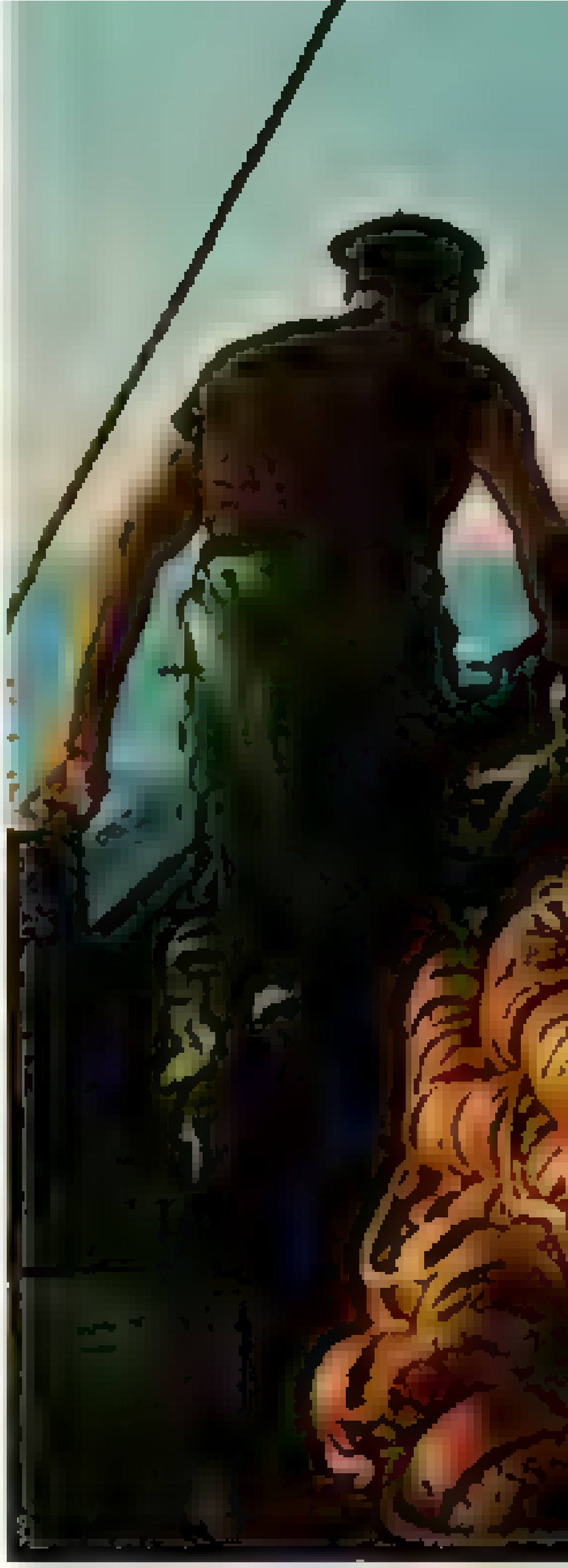



MARKET



Wed to the sea

Mear



[illegible] Santa Rita [illegible] water of a renowned bodyfighter [illegible]

[illegible] of Santa Angelica. Has for [illegible] [illegible]

[illegible] and huts and towels [illegible]

[illegible] the face for [illegible] near Angelica [illegible]

A good he snaps in disgust. "The end. We're going home."

We sail along the rugged, fierce shoreline [illegible] with its secret beaches and [illegible] around rocky promontories and secluded coves [illegible]

It is [illegible] as on the wharf. In four hours, [illegible] Maria says. "Had [illegible] or what [illegible] we [illegible] no fish. Now [illegible] have no stew."

I look at him—at all those [illegible] muscles man—and I don't know [illegible] and I walk away from the wh[illegible]

That ended my experience with [illegible] fishermen. But now, when I see a can of sardines, I handle it reverently, for I remember [illegible] night on the Veranda [illegible] of men hurl [illegible] by Wrecking the most we [illegible] water across my face. Six hours [illegible] mass of [illegible] and my ears, in the little [illegible] beat [illegible] [illegible] lost some [illegible] be regained.

And I know, as I hold that [illegible] Fortuna, Jonquil and Jose Maria and [illegible] are [illegible] high seas and [illegible] gales, dark skies and [illegible] [illegible]

Pesca for da bass!

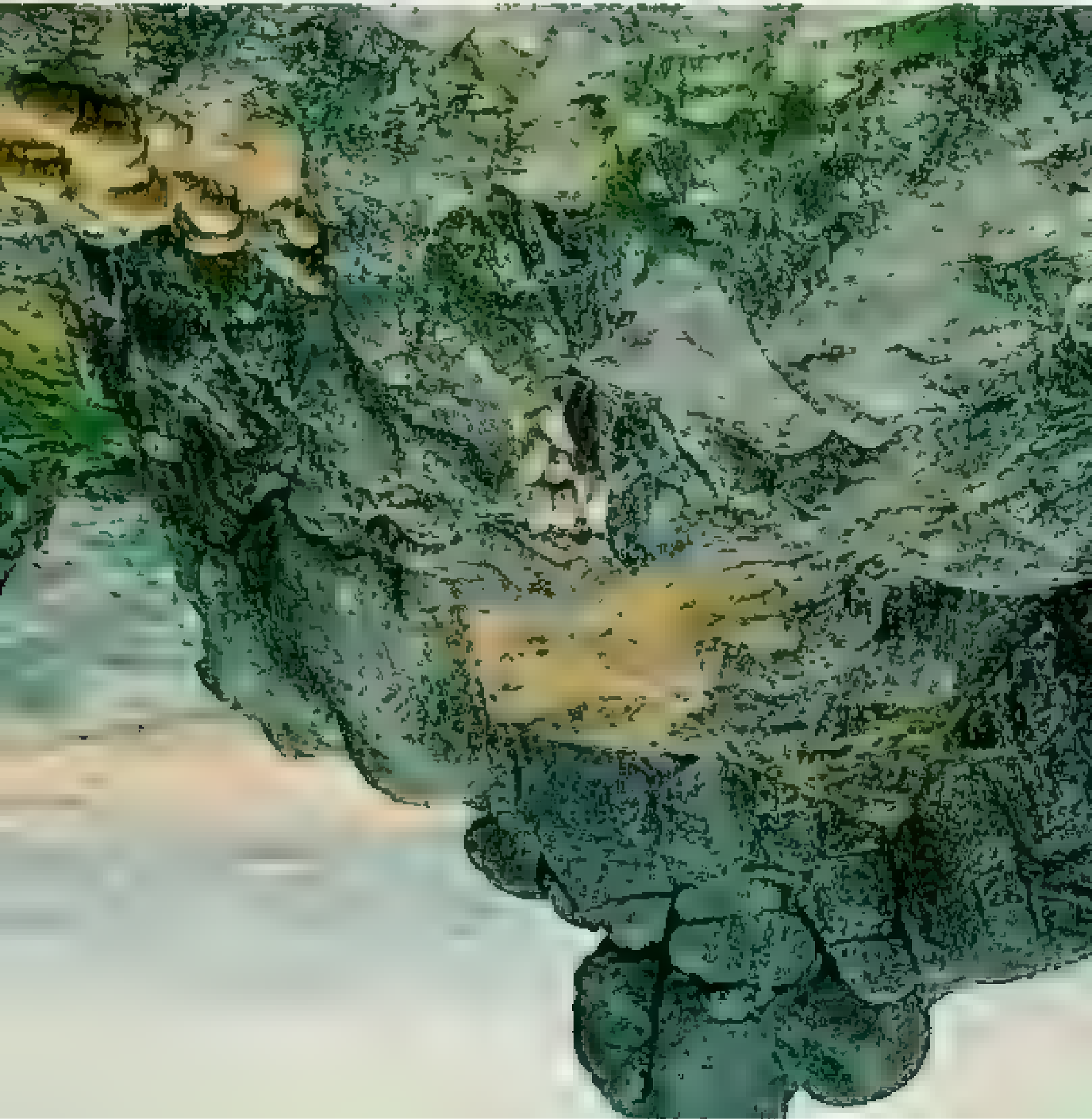
Fast Lungers on Wedding-present Island

[illegible] northward to Port [illegible] [illegible] of the Middle Ages. Some now, time has bypassed the walled village of Olivos, a wedding present [illegible] King Juan Diego to [illegible] The [illegible] we wrought [illegible] change in Olivos [illegible] [illegible] Ranch [illegible] or [illegible]

[illegible] narrow streets, and houses [illegible] itself seems to be suspended in the [illegible] rainbow—preserved intact in the [illegible]

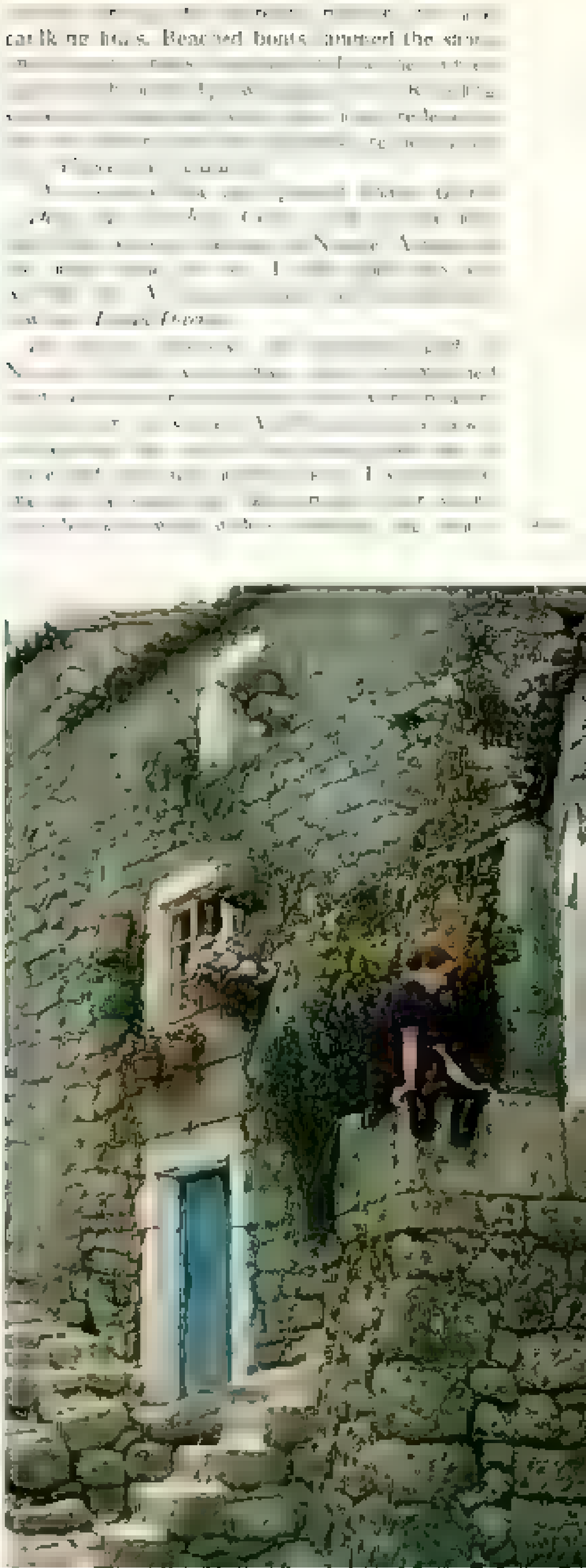
In [illegible] first light I watched men [illegible] their heads. They rode on a [illegible] drawn by gaunt-stepping [illegible]. Then [illegible] Angelica they [illegible] back. The women [illegible] their [illegible] [illegible] [illegible] [illegible] enchantment [illegible] Here [illegible] but Fortuna. [illegible] to Arabs than any [illegible] dream.

In [illegible] I [illegible] upon a broad crescent of beach bounded by the Avenue [illegible] Rosalia. Waves [illegible] gathered [illegible] [illegible] structures, low and white [illegible]



[illegible]

Following the evening, a [illegible]



waiting for a boat that would never return (pages 470-71).*

A scant seven miles from Nazaré, in the town of Alcobaça, stands the grandiose Monastery of Santa Maria. But few people enter the austere church to pray. They go rather to savor a strange and terrible love story.

Save for a plain altar, the church contains only two caskets, each carved from a single block of white stone. To the right of the altar lies Dom Pedro I, King of Portugal from 1357 to 1367, to the left, his Spanish mistress Inês de Castro. On her head is a crown. And never rests the stone.

Inês had borne Pedro—then the crown prince—several children. Because she was Spanish and because the children complicated the royal succession, certain counselors of Pedro's aging father, King Afonso IV, urged that she be kept out of the way. One day Afonso visited Inês. He made a final demand that the comely foreigner abandon his son. She refused. Before the day ended, his executioners murdered her and interred her body in Coimbra.

Sorrowing King Crowns a Dead Queen

At the news of her death, the raging Pedro, who later swore that he and Inês had been secretly married by the Bishop of Braga—rose in revolt against his father. In 1357, he mounted the throne. The guilty counselors fled, but Pedro managed to have two of them extradited from Castile.

In his "cruel and pitiless rage," recalls a chronicler, "he put them to the question himself." He ended by tearing out their living hearts—one from the front, one from the back. Then, the story goes, Pedro exhumed Inês' long-buried body, crowned it in a royal ceremony, then borne in torchlit procession to the tomb at Alcobaça. A few years later the king joined her in death.

Now, in their immortality of white stone, he overlooks the foot of her bier so that when they rise on Judgment Day, the first sight for each will be the other's face. [illegible] tomb on Pedro's sepulcher are the words *Até o fim do mundo*—"Until the end of the world."

Almost directly east of the somber resting place of Pedro and Inês, the town of Tomar nestles in the green valley of Rio Nabão. Here, above the houses, among pines and cypresses, sprawls the Convent of Christ—a summary in stone of Portuguese history.

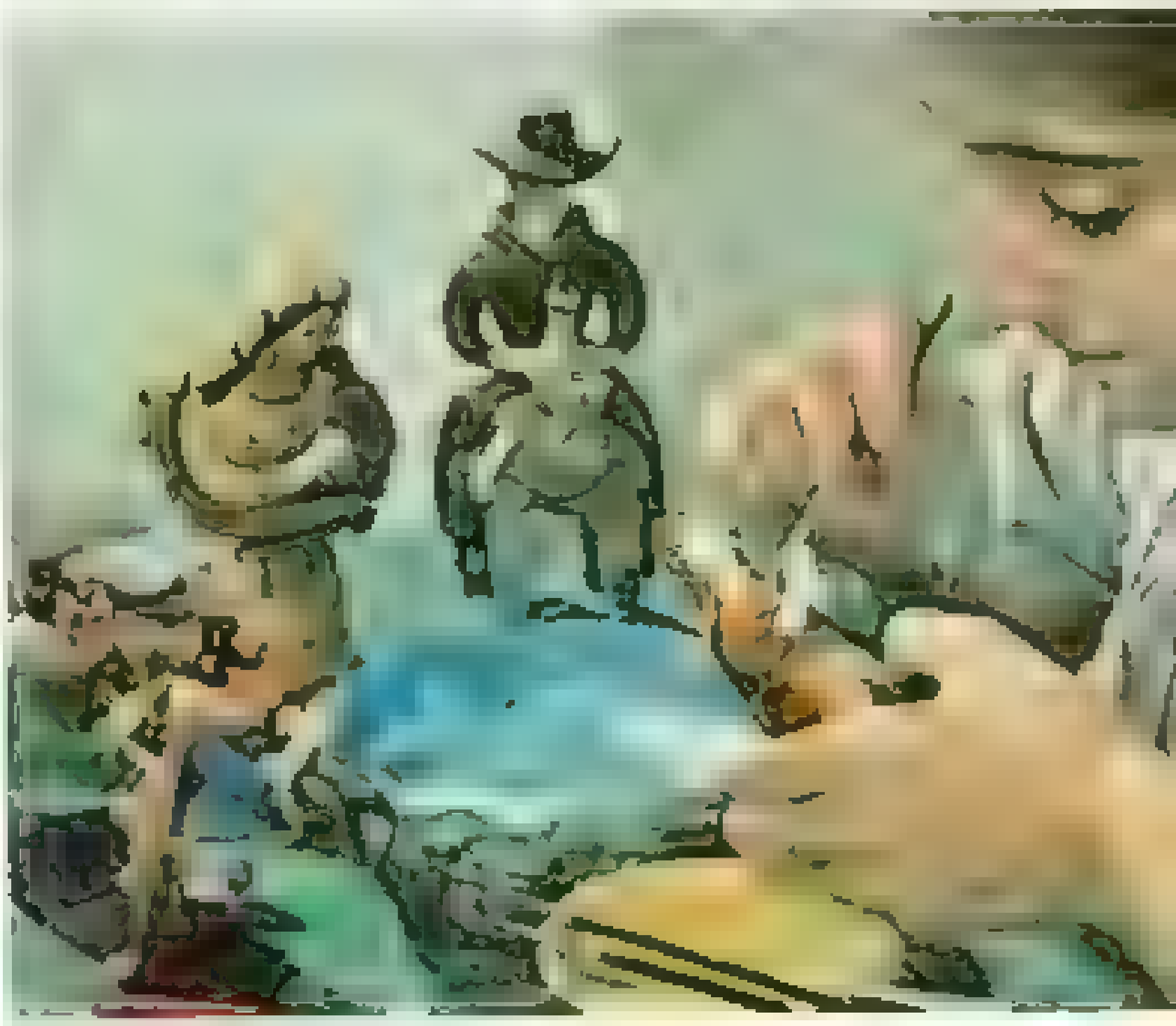
In 1160, the Knights Templar erected a fortress church on this spot, then the frontier between Christendom and Islam. When the papacy suppressed the Templars in 1314, the Portuguese Order of Christ absorbed the knights' immense landholdings.

The battlemented church still stands. From its octagonal sanctuary, a ruined echo of the [illegible] passed into the Chapter Room. There, on austere wooden chairs, the Knights of Christ and planned their campaigns. In a square cloister, where Gothic arches framed orange trees, [illegible] my feet trod numbered slabs [illegible] the remains of a knight, holy monk, hard warrior, who had wielded his sword for God and this earthly kingdom.

Henry the Navigator, Grand Master of the Order of Christ from 1418 to 1460, diverted his wealth and manpower into his voyages of discovery, and the knights' red cross blazoned the sails of every caravel. Later, as treasure from the Orient poured into Portugal, the same Manuel the Fortunate who built Jerónimos added a nave to the convent and gave it a celebrate [illegible] carved that "the stone sings."

But, in the end, it is the stark simplicity of the Templar church that haunts the imagination. As I left, I noticed a blurred Latin

*"Sailed With Portugal's Captains Courageous," by Jean Vallier, NATIONAL GEOGRAPHIC, May [illegible]



When we walk

Garden wall of white

Sun-baked terraces

Pastors' Barely Taste, Never Swallow

Instituto do Vinho da I

K

Baroque Facade of Mateus, near Vila Real

Horses [illegible]

[illegible] windows, dreams, too, of a future that will see the Algarve—rich in sun and sand and [illegible] orchards—emerge as Europe's new Riviera.

Stamp of the Moors Still Marks Algarve

[illegible] like the Arabic [illegible]

[illegible] love he watches her languish [illegible] endless acres of almond [illegible]

petrated into a shadowy subterranean galleries that, by mysterious ways, penetrated far beyond the castle walls into the cellars of the town. Here, a thousand years ago, Moorish kings had stored food for their garrisons.

Mounting to the battlements, I gazed out over the rich fields surrounding Sagres. The old man had seen and he had led him and me and hatred. His arthritic hands clasping the head of a cane. "Sir, senhor," he said, "what do you think of our castle?"

"It serves us," I answered, "and be grateful."

"Yes," he said. "The Moors built well. For instance, that great cistern we passed—Cisterna da Moura Encantada—still supplies water to Sagres. I am a man of this town—a Portuguese and a Christian, proud of my ancestors as well as of the Silves from the infidel. But each year I see it decay a little more. And, forgive me, I feel a certain nostalgia for the magnificence of the past. So I come here every day."

Love Opens a Gateway to Treason

I nodded. My hand, too, [illegible] the cross of my arms, slipped to the stones at my feet.

"Yes, senhor," said the old man. "The cistern is very old. The Moors taught them improvements. No army of that time could have taken this castle by storm. And none did."

"How, then, did it fall?"

He pointed to a narrow opening to the north wall. "That is the Porta da Traição, the Gate of Treason. You see, the Moorish King Aben Afan had a daughter who fell in love with one of the Christian knights besieging the castle. They exchanged notes, and he persuaded her to meet him one night at this gate. When she opened it, the Christians swarmed in and massacred the garrison."

"What happened to the princess?"

He shrugged. "Who knows? Tradition holds that every year she appears at midnight on the Feast of St. John to sing a sad Arabic song. That is why we call the cistern of the Enchantress Moura. Perhaps," he added, "she too has regrets."

Memories [illegible] of regrets and of dreams. [illegible] my trip at Porta de Sagres. Here at the bleak and windswept tip of Portugal Prince Henry the Navigator had revolutionized the art of seafaring. In an age when ships never willingly ventured out of coastal waters and knowledge of the sea ended at the horizon, Henry had decided to plunge into the gray unknown stretch to the west and south of Sagres.

He recruited sailors, scholars and scientists from all Europe and brought them together near this lonely head. And Patiently, he nurtured their loyalty, he labored among charts and astrolabes. In time, he showed his countrymen—condemned by the cruel realities of geography to a marginal existence on the edge of a continent—the sea path to greatness. And they followed it.

The sea does not stand at Sagres. Even on the stillest day it claws and smashes at the base of the high dolomite cliffs. From their edge I gazed out into a sullen infinity of ocean. Five centuries ago Henry had stood there. The solitary ascetic had looked beyond the pounding waves, and a vision of far lands had dazzled his eyes.

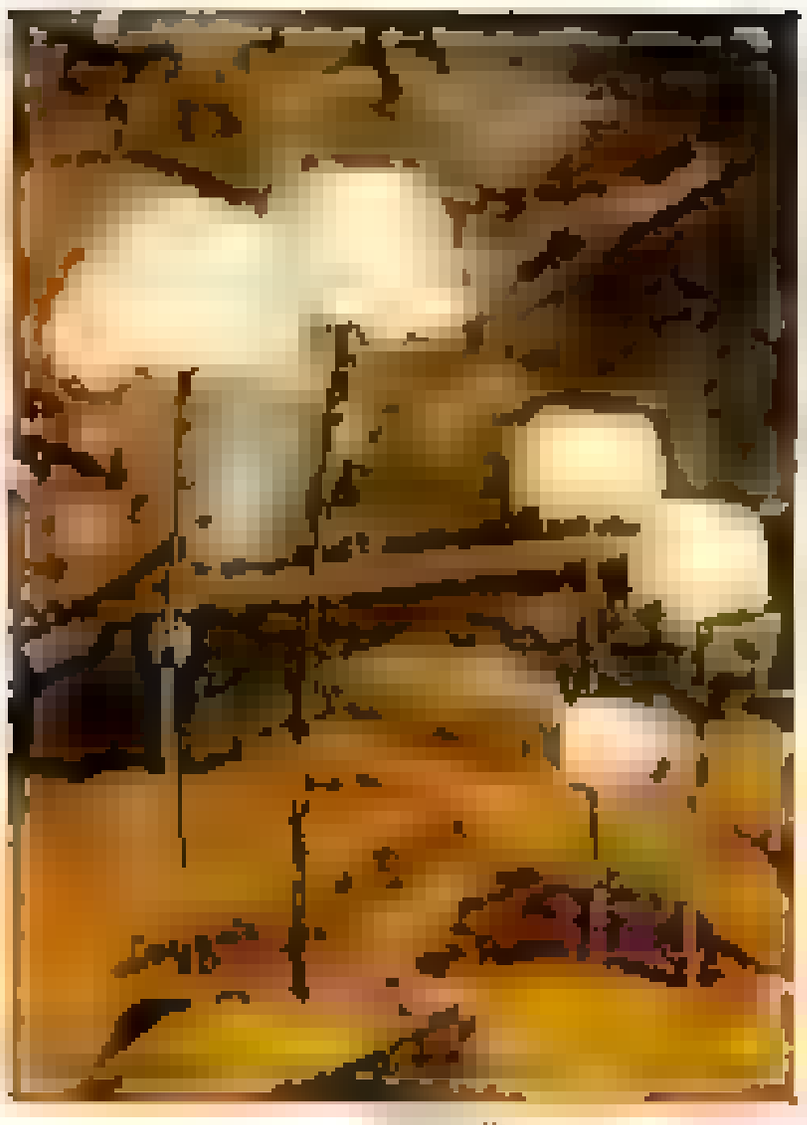
The prince died in 1460, before the greatest of the discoveries. Before Dias and da Gama and Cabral and Magellan. But he was the moment, his the spirit that guided those voyages as surely as if he had piloted their courses with his own hand.

So I stood there at Sagres, on the flat head land ravaged by salt winds, where Henry had given the Portuguese their empire. A business had lost it at Kasr el Kebir, Joao IV had wrested some of it back from Spain in 1640. But the 20th century saw the loss of Brazil and central Africa. In 1961, Goa, Damão, and Diu—Portuguese for 400 years—passed to India. And now violence mutters on distant thunder in the last of the African territories.

I looked at the hostile ocean, and I wondered if our own age would finally answer the question that has haunted Portuguese history since the time of Henry: Portugal has followed a cross and a flag beyond the seas—to what destiny?

THE END

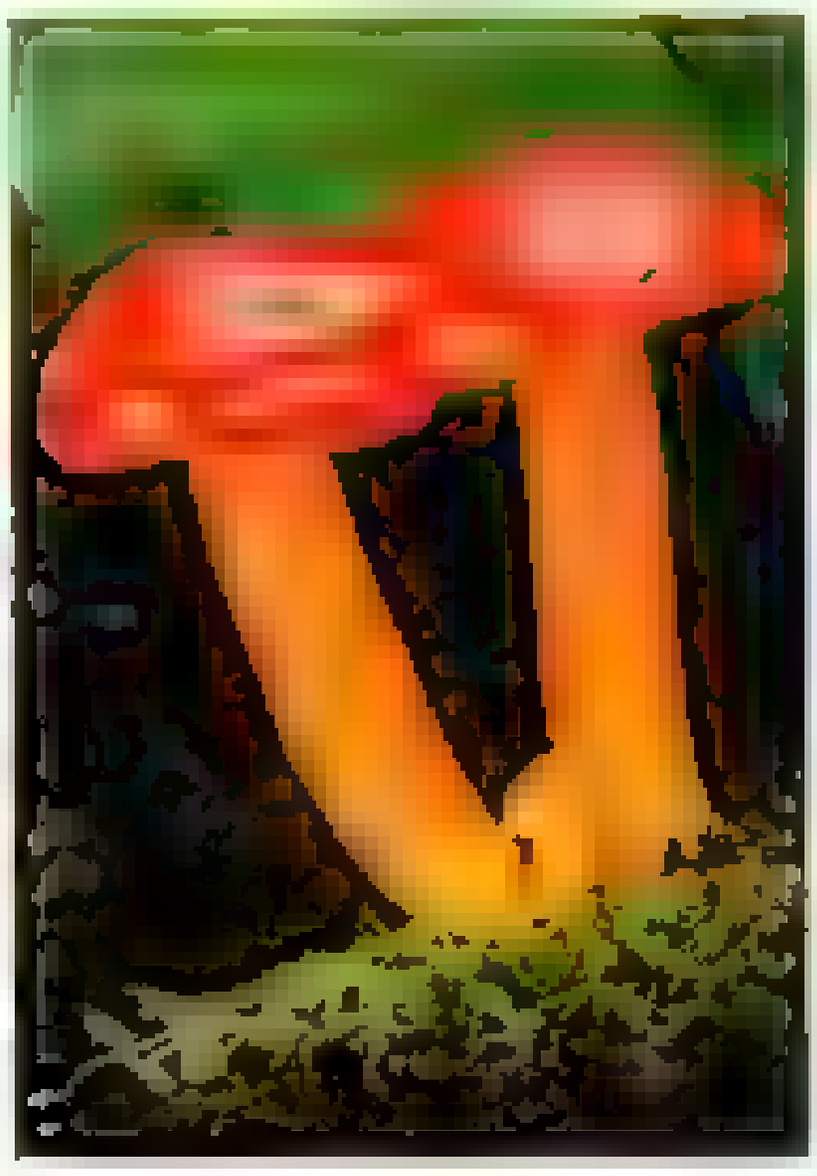
Scarlet Cross of Christ still covers the sea, sailing a calm Atlantic. The Portuguese [illegible] shipyards at Sagres and Sphere *Joao Sebastiao de F*[illegible] have [illegible] been at the start of the [illegible] 934 Lisbon Bermuda square-rigger race [illegible] and the 15th-century caravels [illegible] that first ventured beyond the [illegible] Sagres sails bear the cross of the Order of Christ. She carries the name of the foundation where Prince Henry the Navigator [illegible] has ships set sail for the seas of the world.

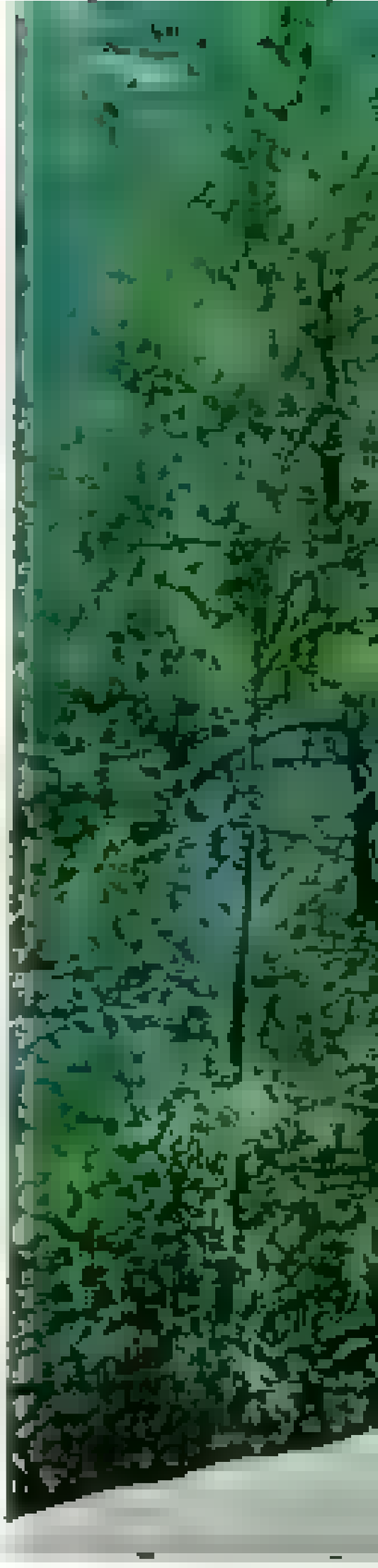


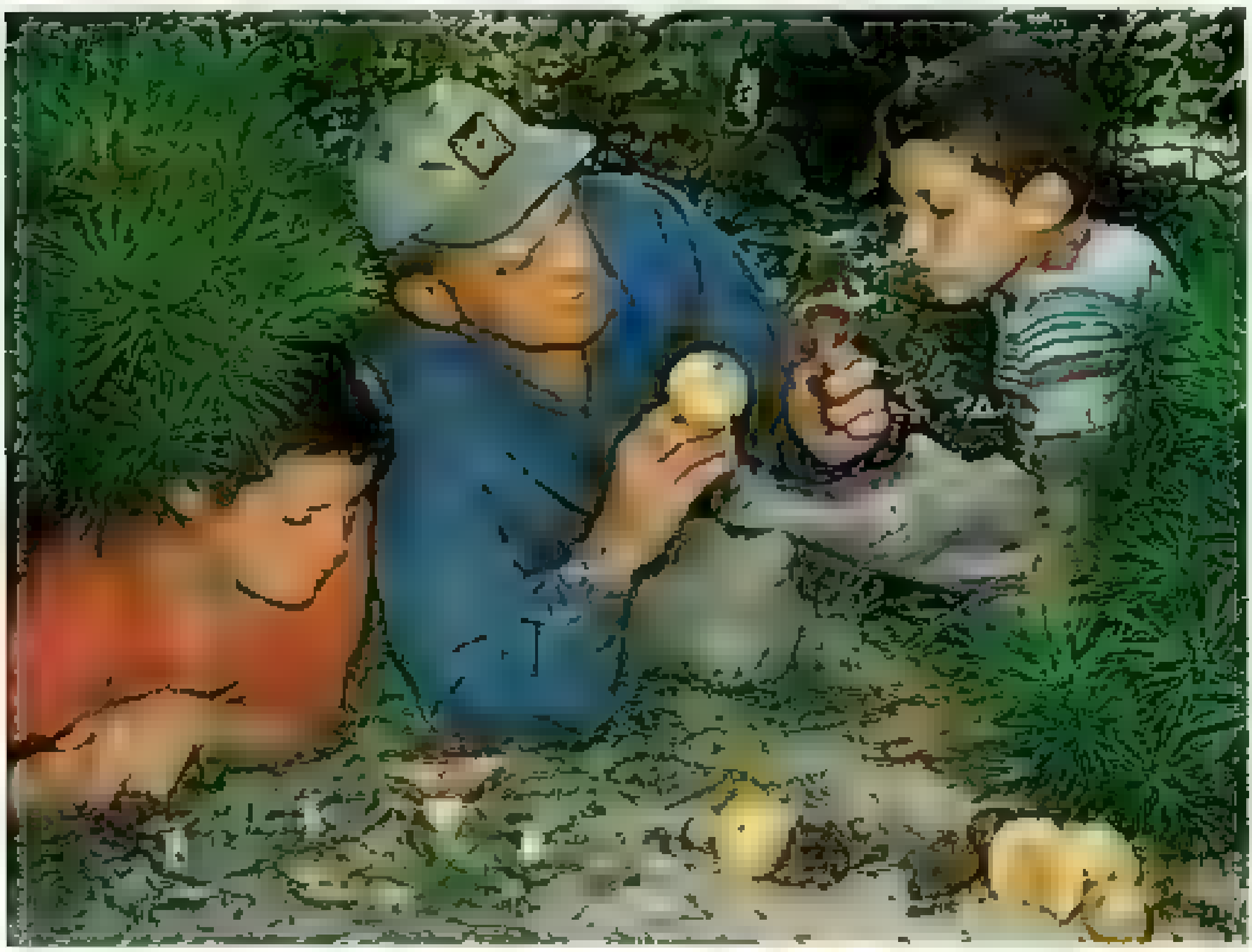
Bizarre World of the Fungi

Article and photographs by
PAUL A. ZAHL, PhD

Wetsel Impact of [illegible]





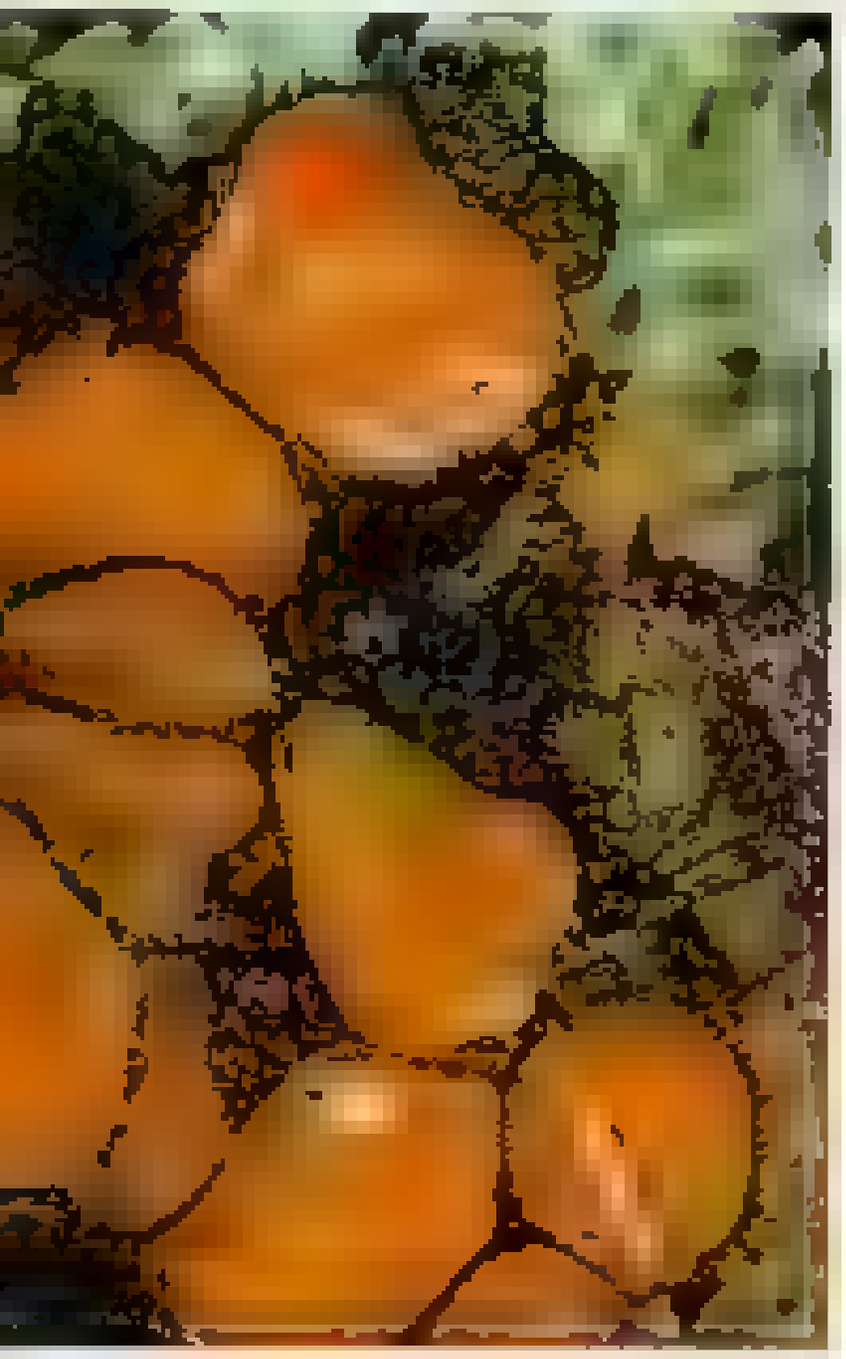


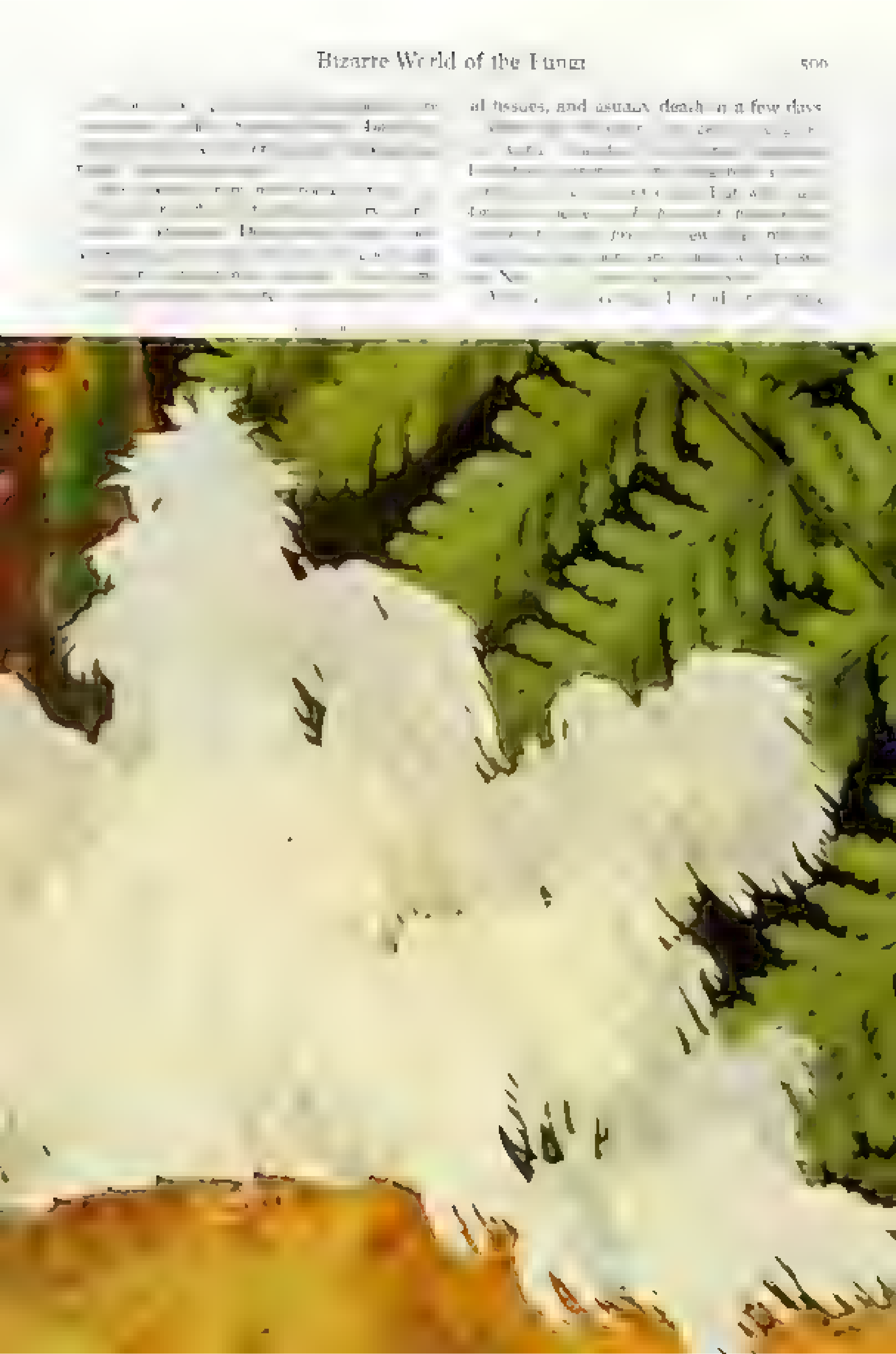
Key to common lethal fungi (shown on facing page)

FUNGI

Beware! Not for the dinner table

T





harmful bacteria, for I know that [illegible] harmful mushrooms may [illegible] lay a useful role. Underground filaments of certain fungi entwine and invade the roots of particular trees and other plants to their mutual advantage. Collectors have noticed that *Boletus edulis* prefers to grow near pines, *Amanita caesarea* near beech, *Bole-* [illegible] and [illegible]

Benefits Flow in Two Directions

With their filaments, the fungi have a superior capacity for absorbing nutrients, these essential as the carbon to the tree. The tree, in turn, manufactures carbohydrates through photosynthesis and transports these to its roots, where the fungus utilizes them as food [illegible] sheath.

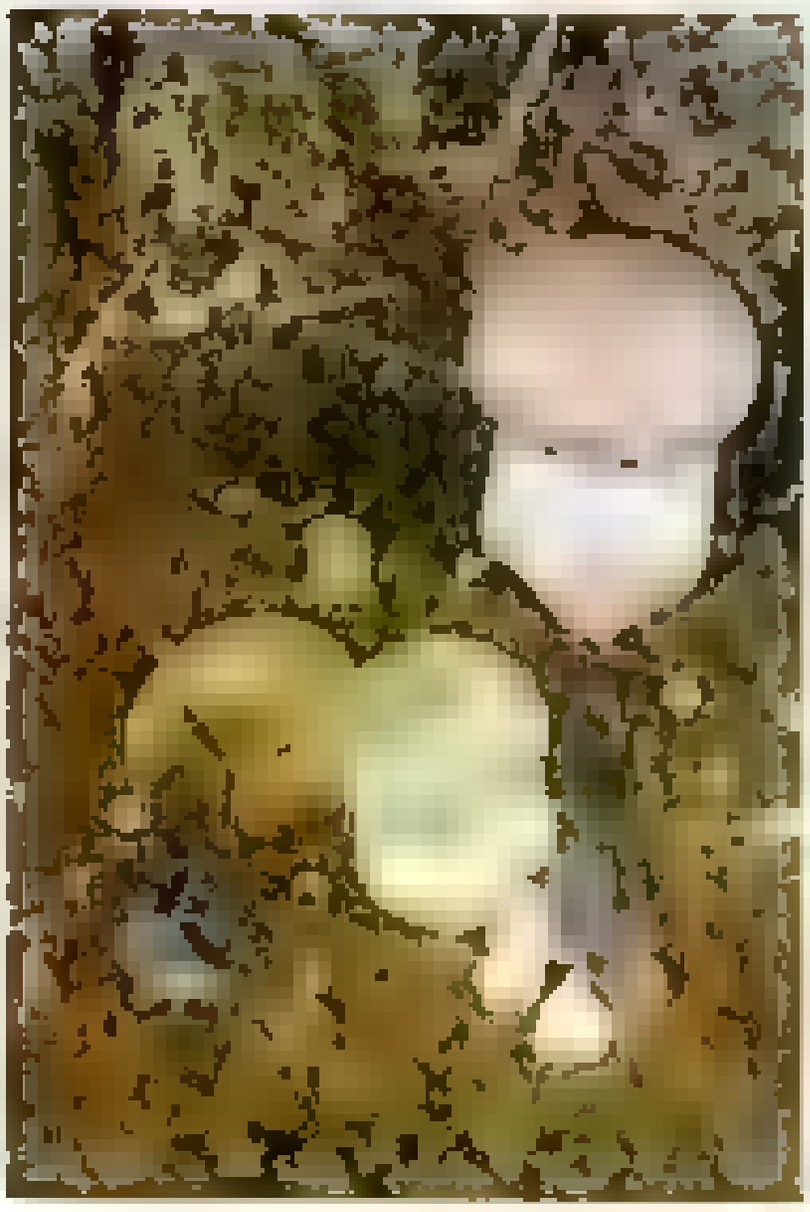
Plant fossils 350 million years old reveal the presence of root-like structures. Over the eons, some plants have come to depend [illegible] on the association between fungi and [illegible] filaments, an association so old and so [illegible] the Indian pipe (page 624), for example, lives in deep forest. Unable to manufacture its own food by photosynthesis, it depends for sustenance on a fungus which acts as a pipeline between it and a green [illegible]

Often, [illegible] great deal of effort [illegible] cultivate seedlings of French truffle [illegible] a culture of fungal filaments [illegible] with the roots of the future plant [illegible] a result of much knowledge gained in recent years, many details of the symbiotic [illegible] are still unclear to botanists.

For some New Jersey countryside residents, another curiosity of fungus life. In a field of lush grass, I came upon a nearly perfect mushroom fairy ring about 2 [illegible] across. In such circles, bare years of old believed the "wee folk" came to dance at night.

Some species cause a withering of grass within a ring, suggesting the wear and tear of

Harvest time



in an underground farm

[illegible] like eggs in beds of compost at the Bu[illegible]

[illegible]

[illegible] works from planting of the spawn [illegible] as good [illegible]. They are ready for picking [illegible] After seven [illegible] when [illegible]

[illegible] of the [illegible] Within [illegible] may have a withering effect, [illegible] recent [illegible] Most [illegible] are [illegible] with the [illegible] and the [illegible] expanding in diameter as [illegible] 15 inch[illegible] There are [illegible] Remain[illegible]

[illegible] Frenzel's [illegible] Plan

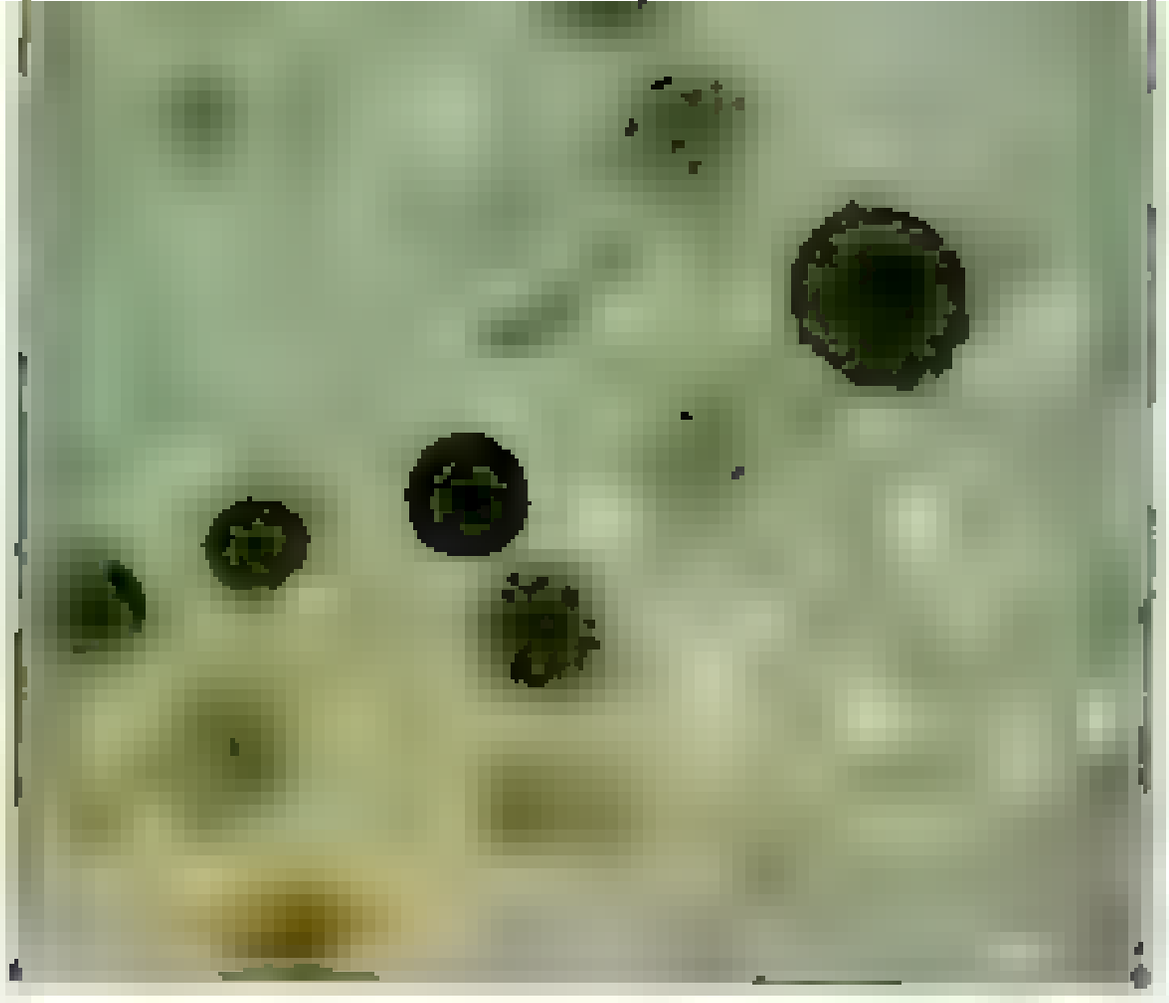
[illegible] I went encountered [illegible] parts of the National [illegible]

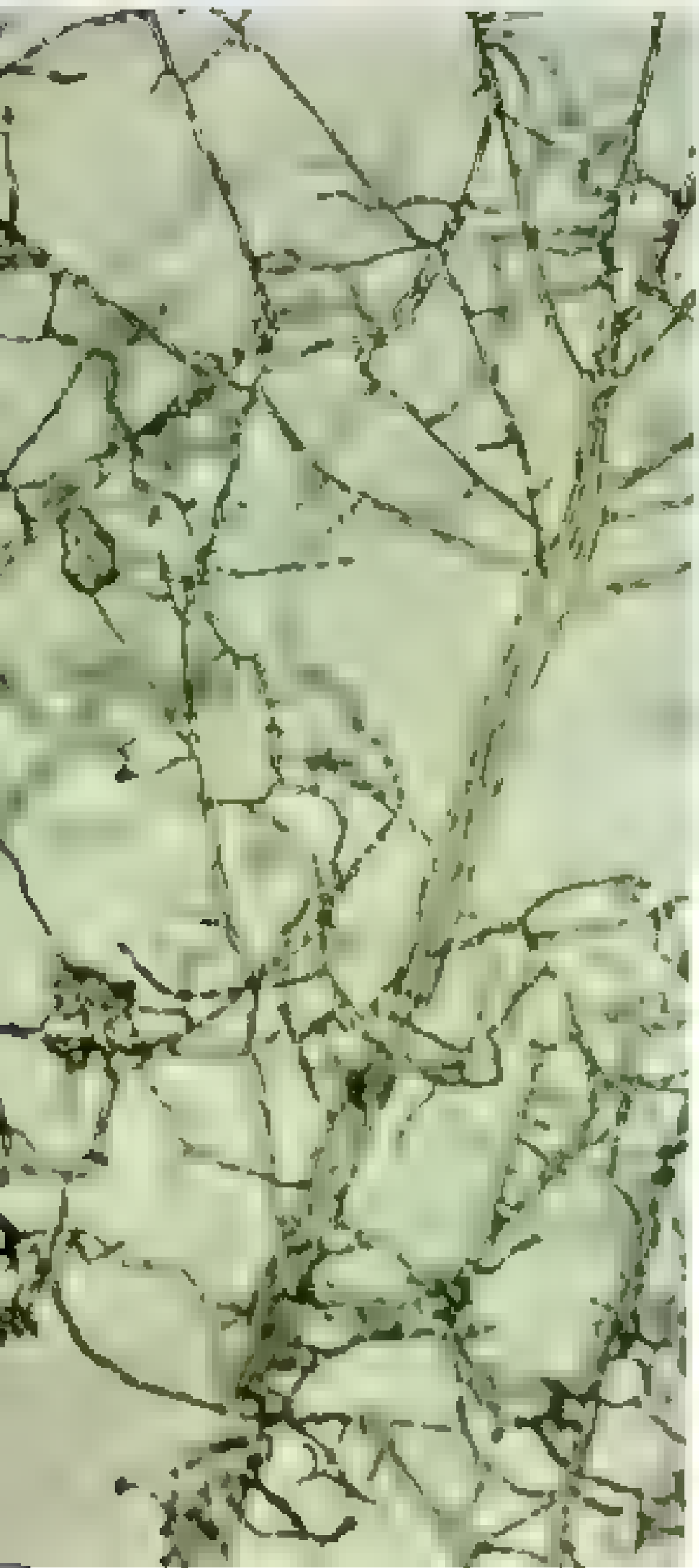
[illegible] I talked to [illegible] relinquished [illegible] years before [illegible] kept [illegible] Cooper [illegible] There [illegible] clusters. Here was pioneered in the late 19[illegible] century in farms [illegible] under greenhouse [illegible] Now [illegible] growing sheets [illegible] all largely farm [illegible] expensive [illegible] markets.

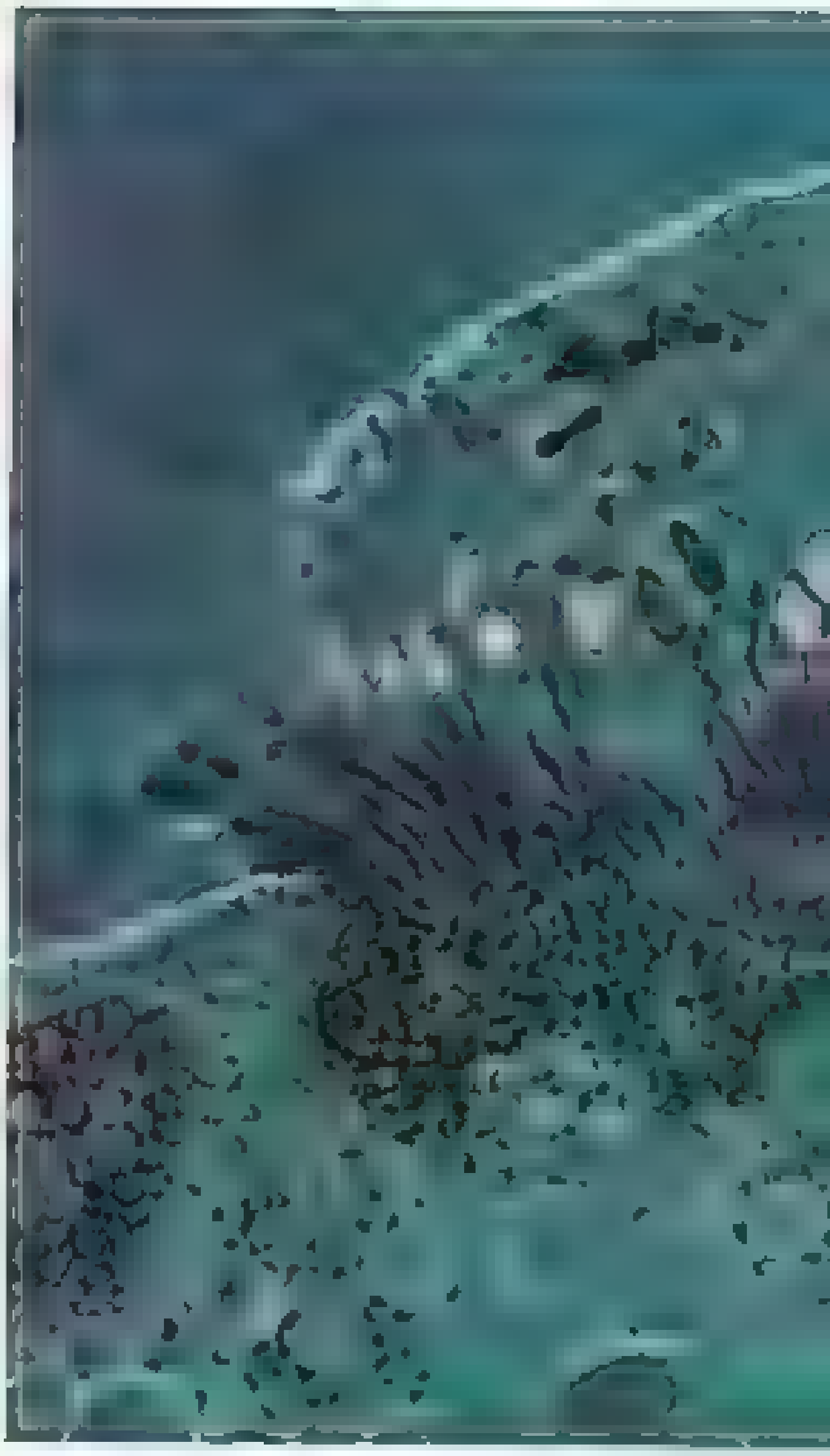
I walked [illegible] the Bridge Creek Mush[illegible] [illegible] miles northeast of Pittsburgh [illegible] mushroom [illegible] world. In an [illegible] mounds of [illegible]

Geometric Characters in Different Land

Although these common American species are considered edible
[illegible] should eat a wild mushroom unless sure of its identity



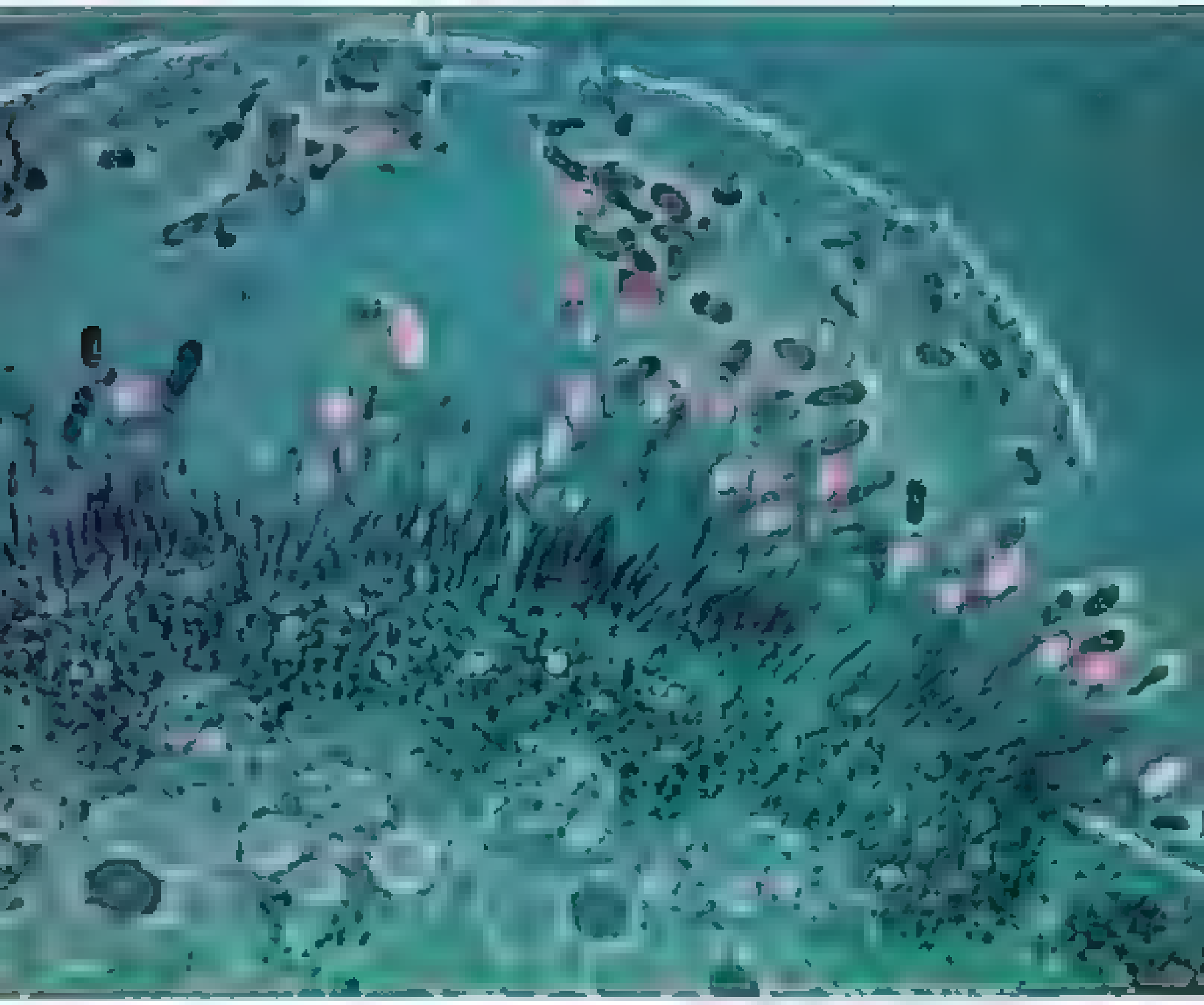




Modern [illegible]

Decorated [illegible]

Tooled [illegible]



commercial hybrids are the nutty-tasting *Coprinus comatus*, the oyster mushroom *Pleurotus ostreatus*, the garden mushroom *Agaricus edulis*, the beefsteak fungus, *Fistulina hepatica*, the giant puffball, *Calvatia gigantea*, the sarcodon or tooth, *Hydnum repandum*, and the truffle [illegible]

Mushroom Pickers Wear Miners' Hats

In the Bother Farms Mushroom Farm [illegible] are allowed for the spawn [illegible] the compost. Then a top layer of [illegible] added, and the trays are stacked in the mushroom house [illegible] Three weeks later [illegible] tiny white spheres begin to appear at the surface of the soil. In 60 [illegible] days they may attain a diameter of [illegible] inches. [illegible] maps [illegible] for the harvest for [illegible]

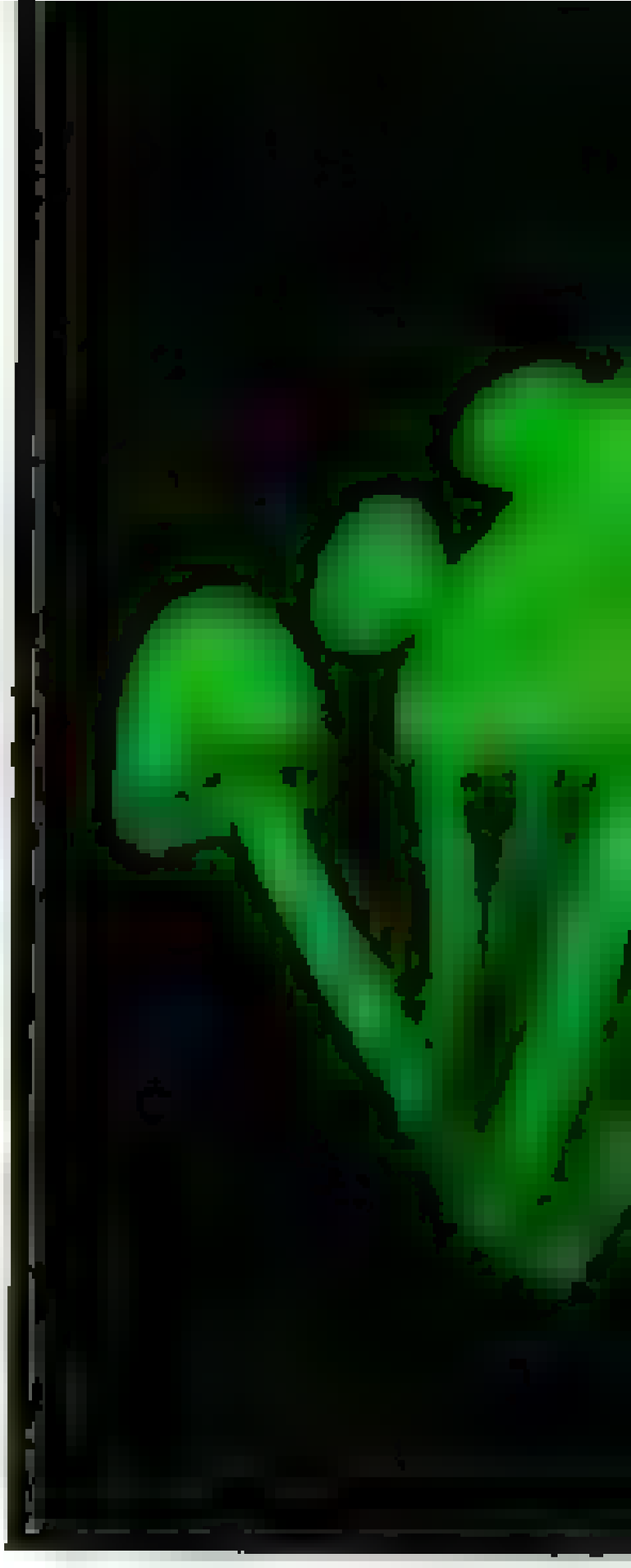
transport by refrigerated vans to canning and produce centers as far away as Minneapolis and New York.

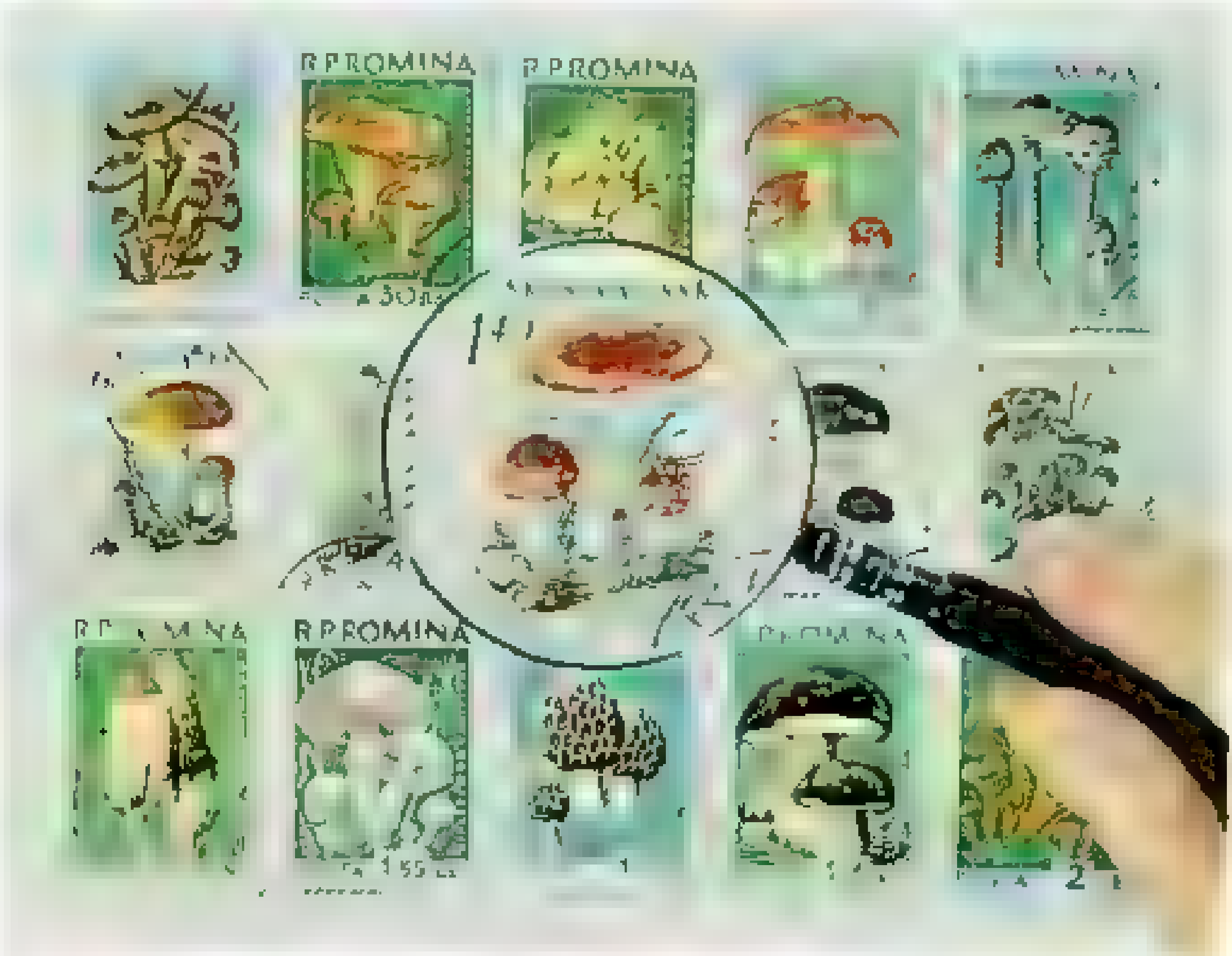
In the farm's spawn and [illegible] laboratory [illegible] small scale by a [illegible] hobbyist.

"Certainly," he said. "There are scores of small mushroom-growing [illegible] throughout the country. In France it has become [illegible] a cottage industry. However, we regard cultivation [illegible] operation."

Mushrooms, he added, are a [illegible] susceptible to a number of fungous diseases. Raising them also calls for careful attention to temperature, humidity, and soil conditions.

The fungus group of which mushrooms are a part has four major divisions [illegible] approximately 100,000 species, [illegible] the common mushroom, puffballs, [illegible] morels, bowlers

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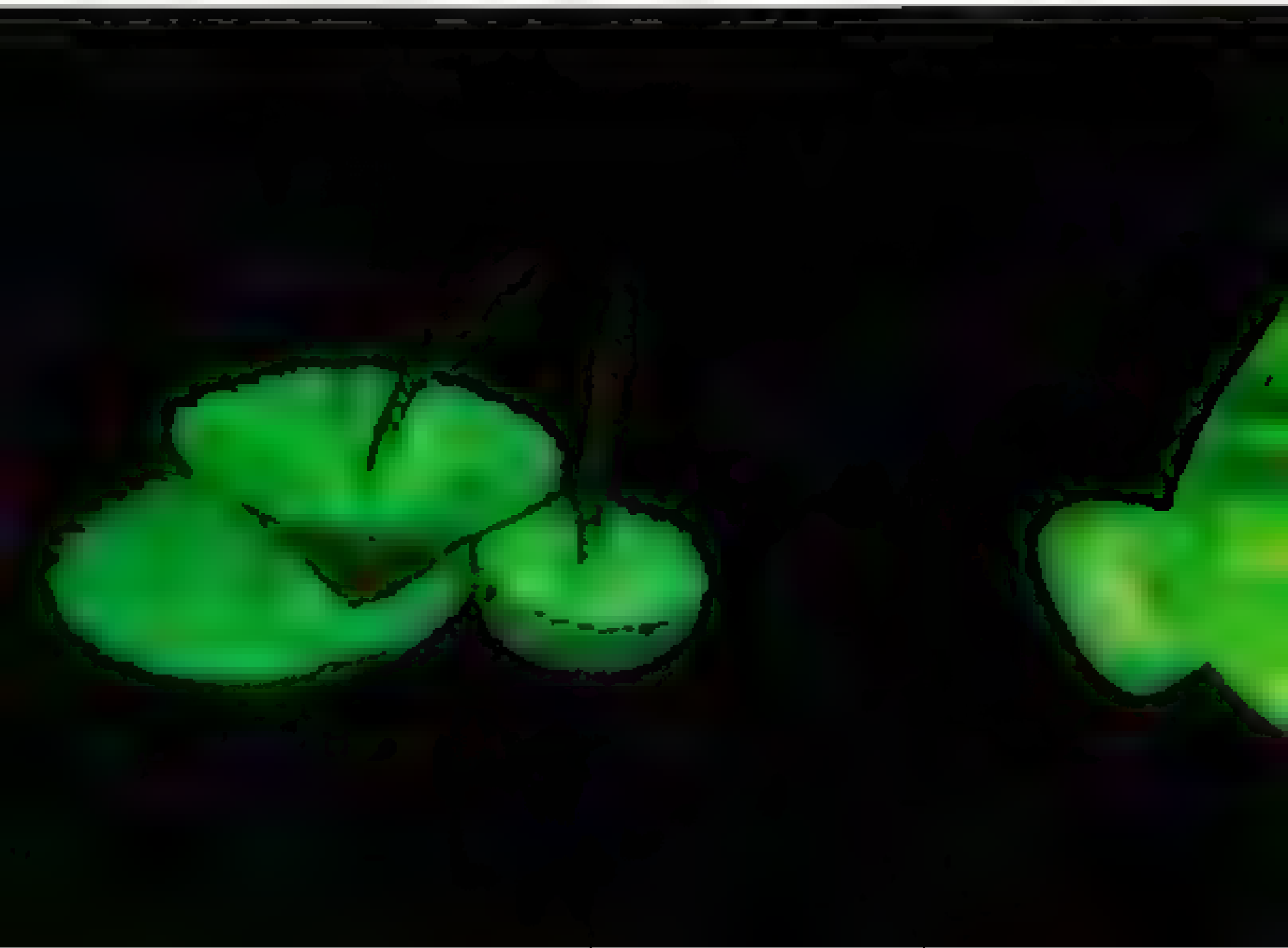


[illegible]

Count Montana pulled

[illegible] diameter. In the days before matches the [illegible] as tinder [illegible] La Rochefoucauld [illegible]

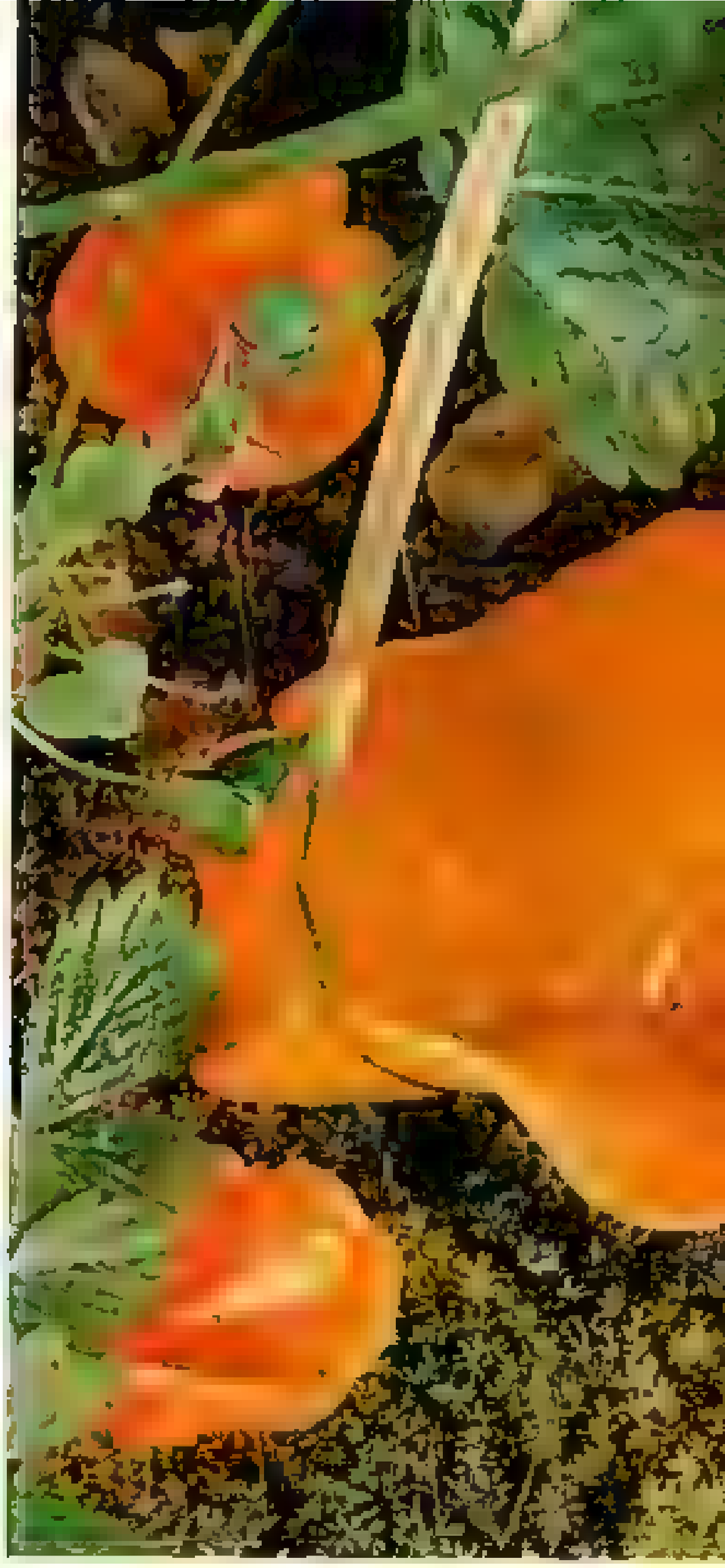
Spores escape through [illegible] *Phallogaster saccatus*, twice life-size. Its bet[illegible] taxes insects that scatter the [illegible]

[illegible] fuzzy—fruitions in a good-size puffball left [illegible] or blower. From a single meadow mush[illegible] a billion spo[illegible] new generation may enter the air in a cas[illegible] the atmosphere by air currents. They may [illegible] earth [illegible] be carried down by rain. Some have been detected flying seven miles high.

Spores Survive Decades of Adversity

Not all spores rise to the world. Those of the [illegible] and molds form a vast, long-lived bank [illegible] fallen leaves or in rotting wood. Spores of other species are scattered by [illegible] wash. Some are freed from their spore [illegible] rock, on spider's shoe, [illegible] internal fluids build up an [illegible] through osmotic pressure [illegible]

Most are but a few ten thousandths [illegible] across. Many species possess an orga[illegible] about any environment short of fire and [illegible] for decades if necessary [illegible] water and extracts it [illegible] an extension of the spore's sac. Long pro[illegible] plasm emerges as a clay, translucent [illegible] one of nature's most primitive forms [illegible] against air, fire, or against one another [illegible] from a different spore. The [illegible] permitting a measure of their protoplasm [illegible] Now cooperation seems in earnest. If [illegible] ing mat. Right: a dark form a cultivated [illegible] turn over some rich humus, hunters are [illegible] will uncover webbings of fungus that [illegible]



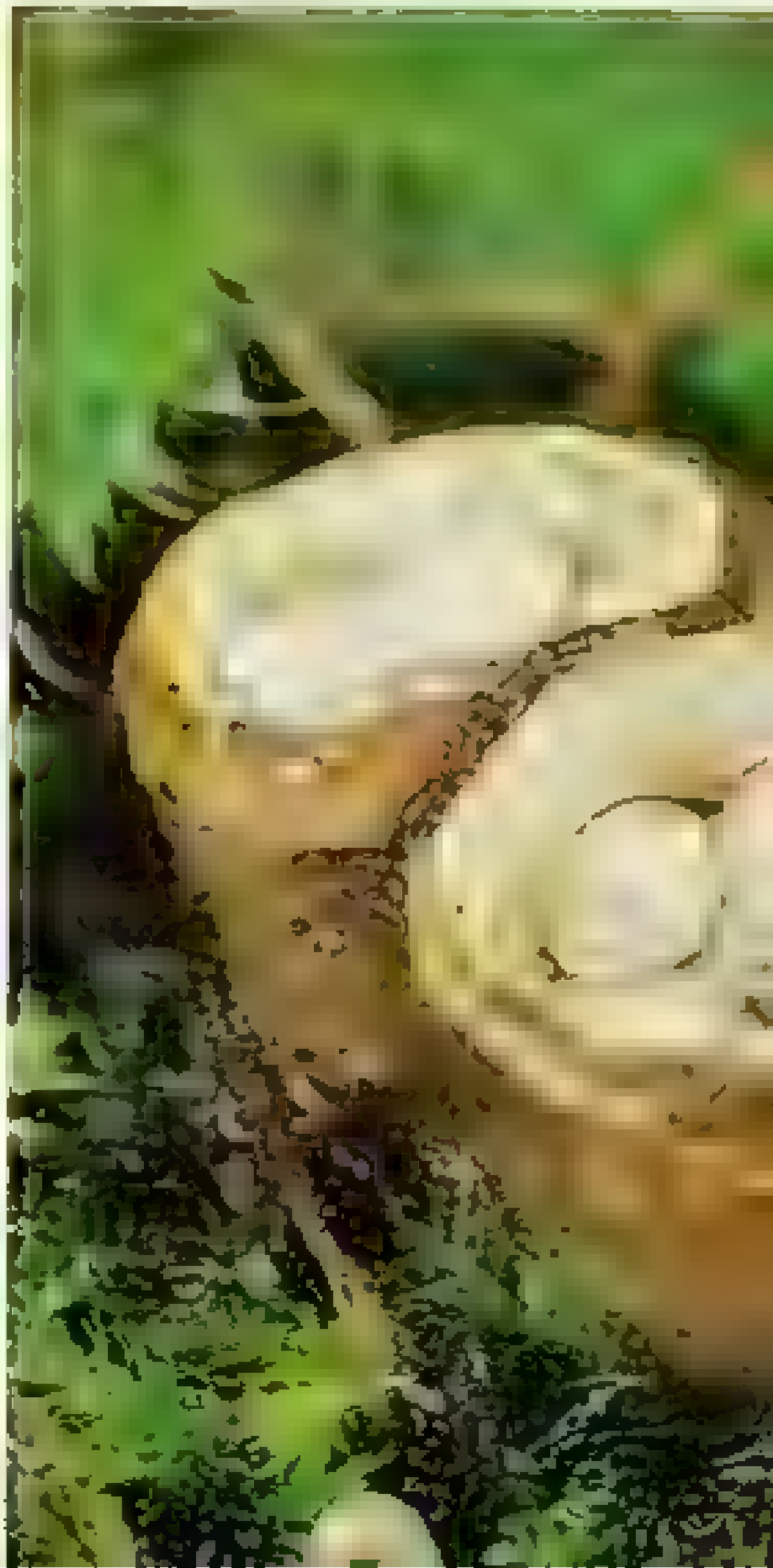
[illegible]

[illegible] Farm swell, we on the [illegible] for an [illegible] active much of their sustenance

Barnyard Fungi Lose Their Pres

[illegible] wonderful worms. These [illegible] Mu[illegible] I came to see [illegible] duces. Images of [illegible]

crop yields in the Arctic and Antarctic [illegible] Man[illegible] brought in by the war [illegible]



Brassica Leaf Spawns a Creeping Ooze

Osprey

Pandionidae

[illegible] Song and Garden Birds.

[illegible]

presentation of North America's

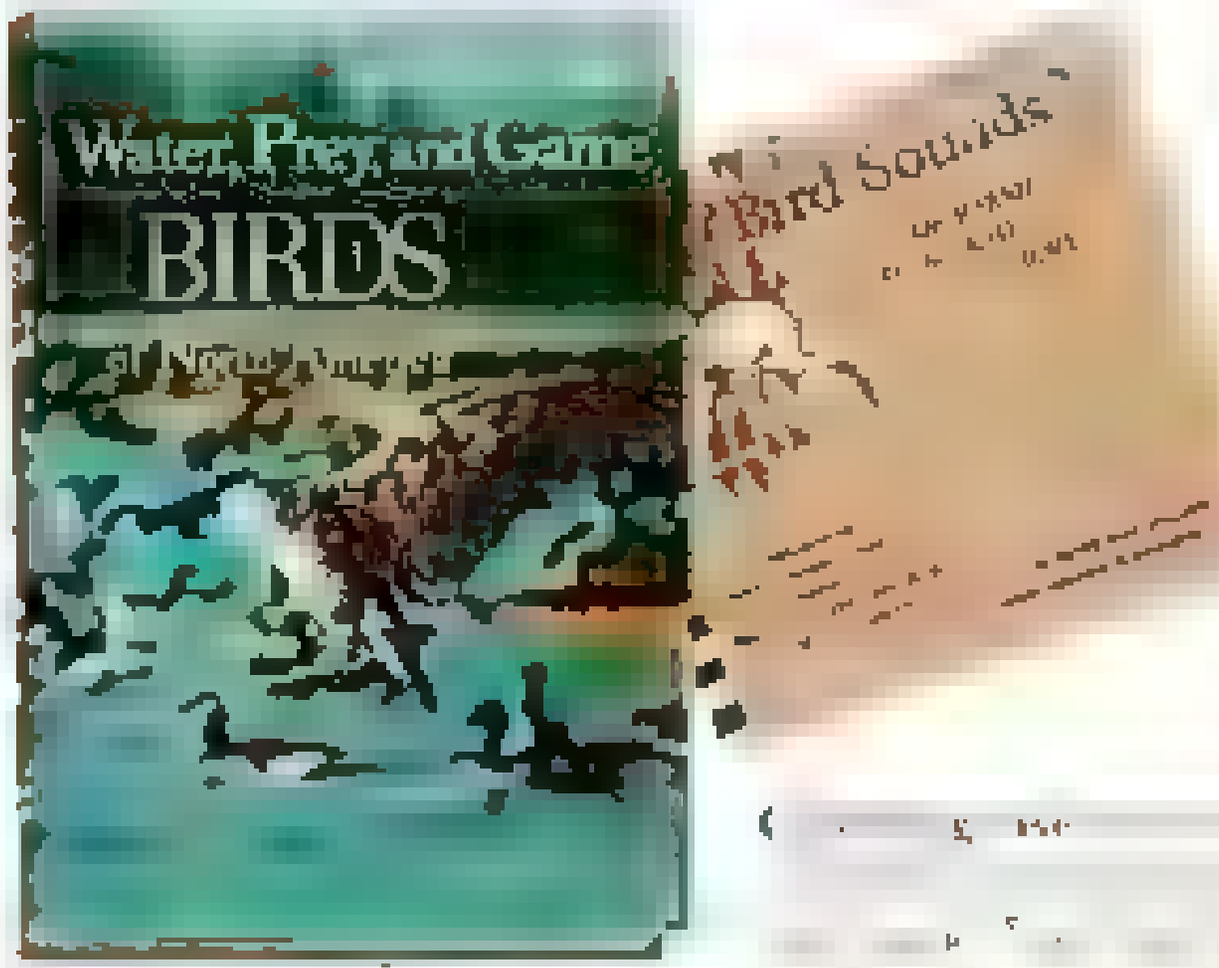
656 major species of birds

Water, Prey, and Game Birds: A New "Singing Book"

By MELVILLE BELL GROSVENOR, LL.D., Sc.D

President and Editor, National Geographic Society

A [illegible]



Tidbit entices a purple gallinule within kissing distance of naturalist-photographer Frederick Kent Truslow. A peanut in his teeth attracts the Florida marsh bird, supplementing skill with endless patience. Mr. Truslow captures birds as they can be seen only in their native haunts. His cameras captured many of the 480 photographs reproduced in *Water Birds and Game Birds*, including these remarkable pictures of the common egret (opposite and below) and the extremely rare California condor. The volume presents comprehensive biographies of 349 species with brilliant color illustrations, anecdote, and scientific detail. It completes the Society's monumental work on North American birds.

[illegible] of the National Geographic Society's latest "hanging bird book"—*Water Birds and Game Birds of North America*.

With [illegible] illustrated [illegible] book comes a long-playing record album that brings the wild, haunting voices of nature into the readers' living rooms.

Together, they make up a lovely and appropriate companion to your Society's first [illegible] book, *Song and Garden Birds of North America*, published last year. The two volumes cover all the 650 major species of birds big and little, to be found in the United States and Canada.

Members who travelled at our [illegible] were [illegible] while sound will be pleased with the new [illegible] hour of listening to voices even more varied than the melodies of the songsters.

With the proof of the book before me and [illegible] voices sounding from my record player I can see again the rookery I knew in [illegible] wood. And how [illegible] I remember one personal experience with a great blue heron.

It was a young bird that had just tumbled from the nest. Unable to fly, it flopped about clumsily on the [illegible].

"Can we take it home?" we asked eagerly.

Father weighed the question. "All right," he said finally, "if you promise to catch the [illegible] to feed it."

This seemed simple to us, and we agreed. We built a wire cage, then set about establishing a supply [illegible] search, caught from the [illegible] pool.

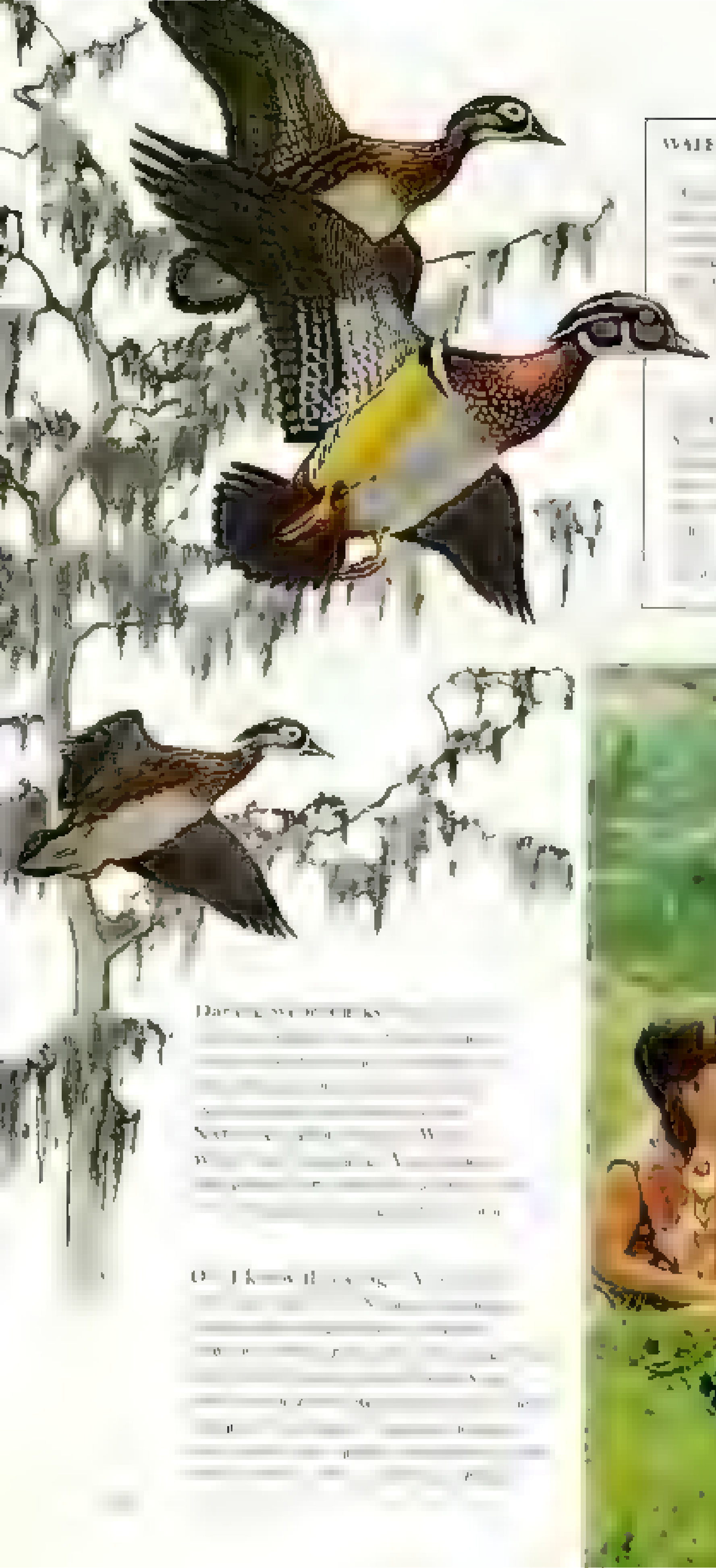
The first two days the heron received our offerings, dust motes clamping a [illegible] beak. But fearing the bird would starve to death, we tried [illegible] to mouth and crammed fish down [illegible] her throat [illegible].

Captive Finds Eating Is Fun

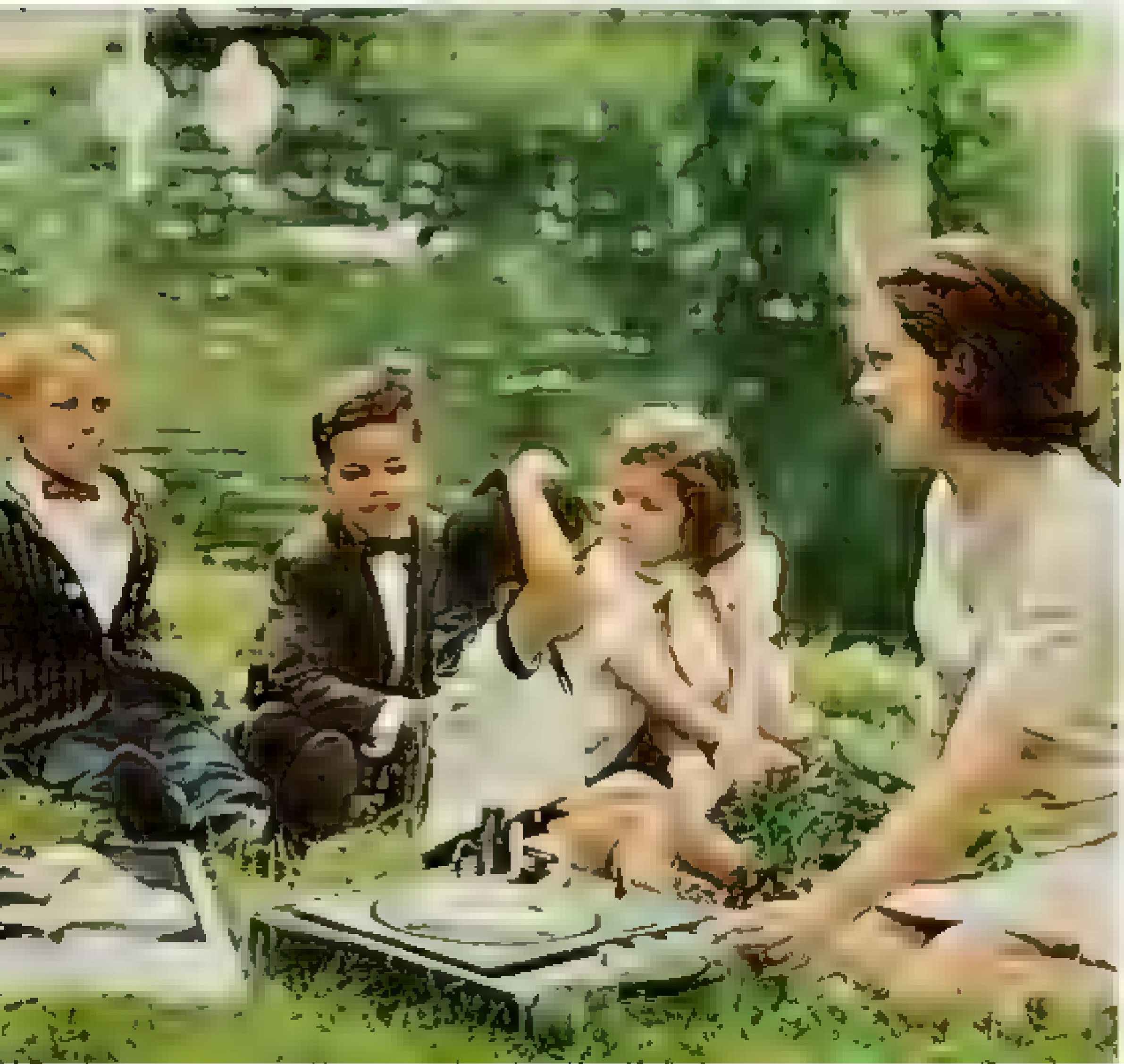
With this first taste our friend came to be pleasures of eating. He grew eight or [illegible] larger each day and squawked for more. [illegible] we were feeding so much that we had little time left for other activities. After his summer I felt I never wanted to see another book and [illegible].

Our heron grew [illegible] in size, [illegible] and [illegible] in appetite. But as he grew his disposition [illegible] worse. We learned to [illegible] much [illegible] the world had [illegible] the [illegible] as jabbings of his rapier-like beak.

Weeks later came a day when we realized the captive no longer needed our help. It [illegible] he was [illegible] that we [illegible] dared in a [illegible].



WATER, PRAY, AND GAME BIRDS OF NORTH AMERICA



Profiles of the Presidents: The fourth of five articles*

AMERICA [illegible] THE [illegible]

By FRANK FREIDEL

Professor of History, Harvard University

IN THE FIRST TWO DECADES of the [illegible] Woodrow Wilson endowed the American Presidency with a powerful leadership the Nation had not known since Lincoln. Several of their successors gave nostalgic tugs backward, but these two—one a Republican, the other a Democrat—established a pattern for succeeding strong Presidents.

At home both sought a larger measure of political democracy and economic justice and a broad sharing in responsibility for world order. They moved to assume the sober duties of the United States in its new status as an industrial giant and major world power.

Roosevelt expressed the Progressive's new progressive role:

"In a century and a quarter as a nation, the American people have subdued and settled the vast reaches of a continent. Ahead lies the greater task of building upon this foundation as themselves, for themselves, and with themselves, an American commonwealth which is social and economic structure shall be square with democracy."

Wilson developed the progressive theme in his Inaugural Address of March, 1913. He noted that while "Our life contains every great thing, and much else that is good in abundance, it also contains much that is disquieting, much that is painful, much that is [illegible]."

"A great nation has come into exuberant waste. We have not stopped to conserve the exhaustless bounty of nature. We have been proud of our industrial achievements, but we have not paused to count the cost. The men and women and children who have borne the burden have not been [illegible]. The government we need was too often used to [illegible] selfish purposes, and those who used it had forgotten the people."

But these Presidents and their supporters, the progressive generation, believed that, without altering the free-enterprise system, they could perfect the dream of the Founding Fathers by employing a scientific approach to the problems of the age with positive Government action. They wished to reform, not destroy, the American way of life.

Progressives "Beat the Carpet"

For the most part, the leaders of this generation were successful young men and women of good education and family background who wished to extend the abundance of the Nation more widely to the poverty-stricken. These ideas were clean Government and social justice.

In 1900 Finley Peter Dunne quoted his character Mr. Dooley, Irish sage and bartender, as saying: "It's not th' people in this country that need a revolution. It's only th' people in the United States that need a carpet."

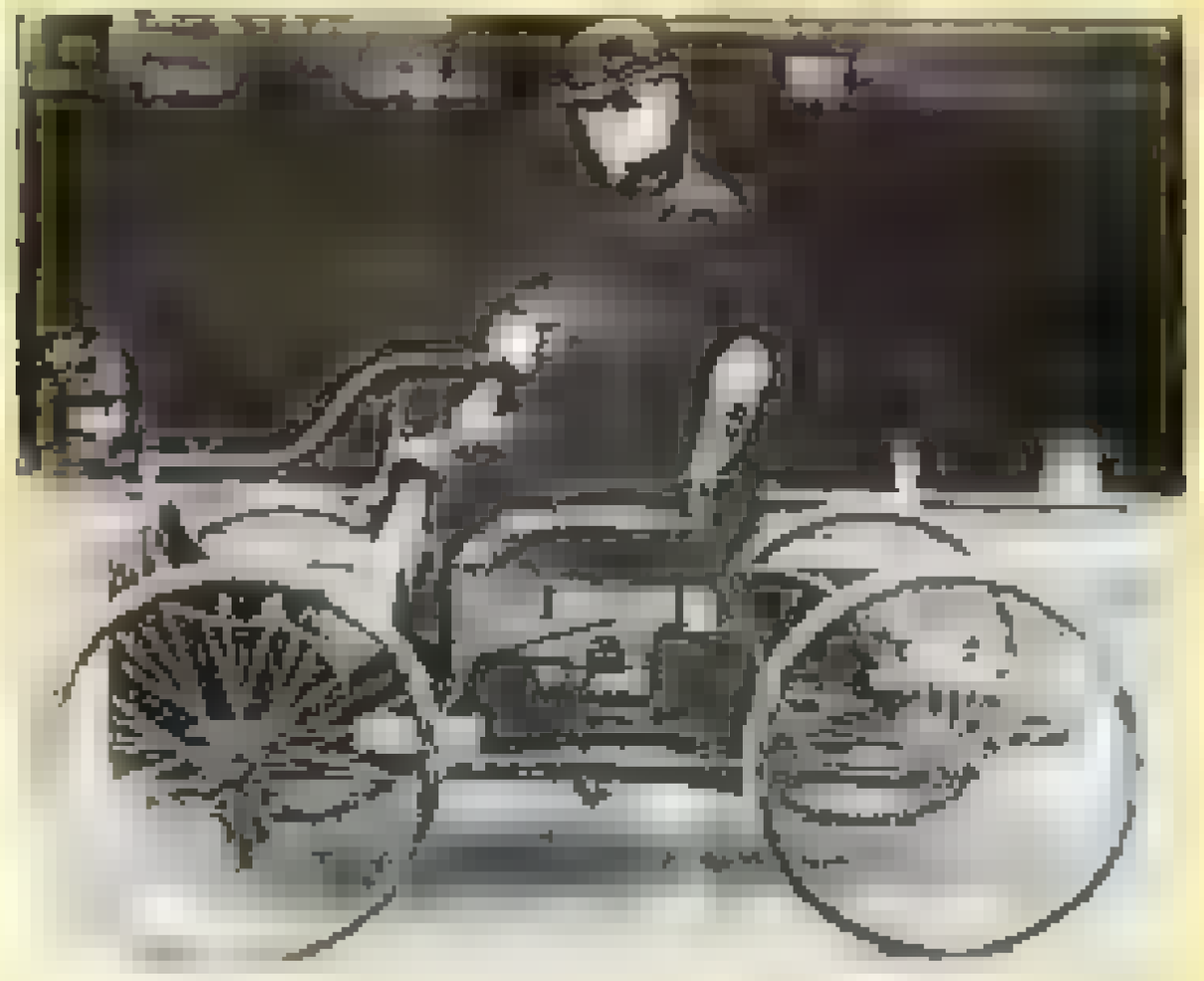
The progressive generation achieved impressive reform legislation in city, state and federal Government. To guarantee citizens

[illegible] of the ballot to [illegible] citizens." [illegible] will appear in January 1969. The series began in November 1968 with Washington through John Quincy Adams and continued in January [illegible] through Buchanan and May [illegible] through McKinley.

[illegible] Commodore George Dewey, under orders from Assistant Secretary of the Navy Theodore Roosevelt, closes for action at Manila Bay in 1898. Weep Olympia's [illegible], Charles V. Gridley, gave the command to fire. Dewey's U. S. Asiatic Squadron blew the antiquated Spanish fleet out of Philippine waters. Thus the United States ended Spain's [illegible] in a 100-day war and entered the 20th century [illegible] to be a world power.

Child at work changes cotton spindles in south[illegible] of the workers were under [illegible] Children sometimes labored 12 hours a day for [illegible] a few cents. Photographer Lewis Hine's portrayal led to laws regulating such conditions. The first federal child labor law passed during Wilson's Presidency [illegible]

The man and the car Henry Ford, apostle of mass production, sits in his first model of 1896 [illegible] model T put America on wheels



Frail flying machine lifts off for a momentous second trip above the dunes at Kill Devil Hill on North Carolina's Outer Banks, during Theodore Roosevelt's Administration. Orville Wright—prone at the controls—made man's first powered flight in a heavier-than-air craft. His brother Wilbur runs alongside to steady the wing. The [illegible] the date December 17, 19[illegible]

[illegible] their political participation, to protect their health and morals, to resist the inevitable encroachments on their rights and [illegible] resources. These reformers sought [illegible] separate [illegible] democracy and [illegible] make the world safe for democracy." [illegible] reaction to Wilson and to the [illegible] seemed to have of Presidents [illegible] like Roosevelt and Wilson. But [illegible] Warren G. Harding [illegible]

[illegible] Normalcy

By 1923 their mood had changed [illegible] and they elected Herbert Hoover, another progressive President and an admirer of both Theodore Roosevelt and Woodrow Wilson.

"We want the vote!" Suffragettes parade through Washington, D.C. The Nineteenth Amendment to the Constitution gave women the franchise in 1920.

"The Pole at last!" Robert E. Peary, with a "Godspeed" from Theodore Roosevelt, became the first to reach the North Pole, on April 6, 1909. The explorer planted the Stars and Stripes, then photographed Matthew A. Henson (center), his Negro assistant, and the four Eskimos who shared in the achievement.

[illegible]

[illegible] Hoover [illegible] Nation to the Nation's difficulties.

Like his progressive predecessors in the White House, Hoover believed the Government should intervene in the affairs of its citizens enough to guarantee a free market and the economy. He hoped for a voluntary, rather than compulsory, way to efficiency. It was his misfortune to be President when the Great Depression struck. Although in time he [illegible] 32 supplied the people [illegible] drastic measures.

Having deep [illegible] abroad, where [illegible] Adolf Hitler [illegible] over. Most American [illegible] were [illegible] ready for leadership [illegible] Roosevelt Administrations. Once more the [illegible] were determined to beat the national carpet

Theodore Roosevelt

[illegible]

THEODORE ROOSEVELT brought [illegible] Presidency vigorously led Congress and the public toward progressive reforms and a strong foreign policy, taking the view that he was a steward of the people, unrestrained by specific constitutional restrictions. In the popular eye he was the "buster of trusts" and wielder of a "big stick."

"I did not usurp power," he later wrote, "but I did greatly broaden the use of executive power."

Roosevelt's youth differed sharply from that of the log-cabin Presidents. He was born on a well-to-do family in New York City in 1858; his brownstone home on East 20th Street is a national historic shrine. But Roosevelt, too, had to struggle—against ill health. When his father told him he had the mind but not the body to sustain a worth-while career, he replied: "I will make my body."

From early childhood Roosevelt was a naturalist, and he learned to ride, hunt, and chase in the wilderness. He eventually did battle in strenuous sports and became a tireless advocate of physical and moral excellence.

While a senior at Harvard University he began work on *The Naval War of 1812*, published two years later in 1882—the first of some 40 books. Using his earnings from writing to supplement his income, he decided to devote himself to public service.

Backed by a reputed band of club men in New York [illegible], Theodore Roosevelt at 23, was elected to the New York State Assembly. The courtly, energetic way he fought for clean government projected him into the headlines.

Sorrow Sends T. R. to Dakota

In 1884 his first wife, Alice Lee Roosevelt, and his mother died within a few hours of each other. Roosevelt left New York for the Badlands of Dakota Territory, and there in the next two years he mastered his sorrow as he lived in the saddle, driving cattle, hunting, and capturing three thieves. The Theodore Roosevelt National Memorial Park in North Dakota, which includes T. R.'s ranch, was created in his memory.

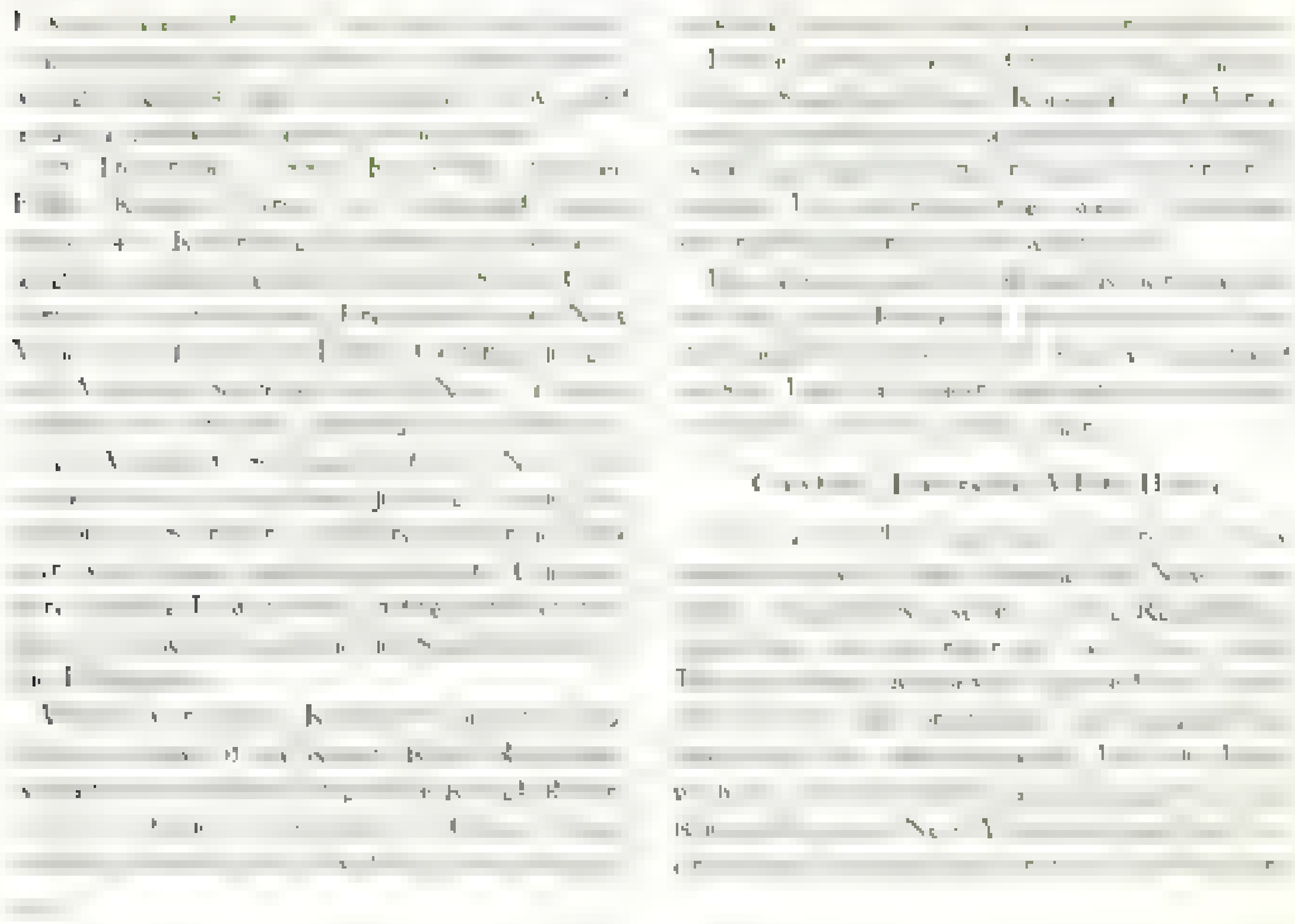
In all his adventures, with or without his youth and as a man, he showed utter fearlessness.

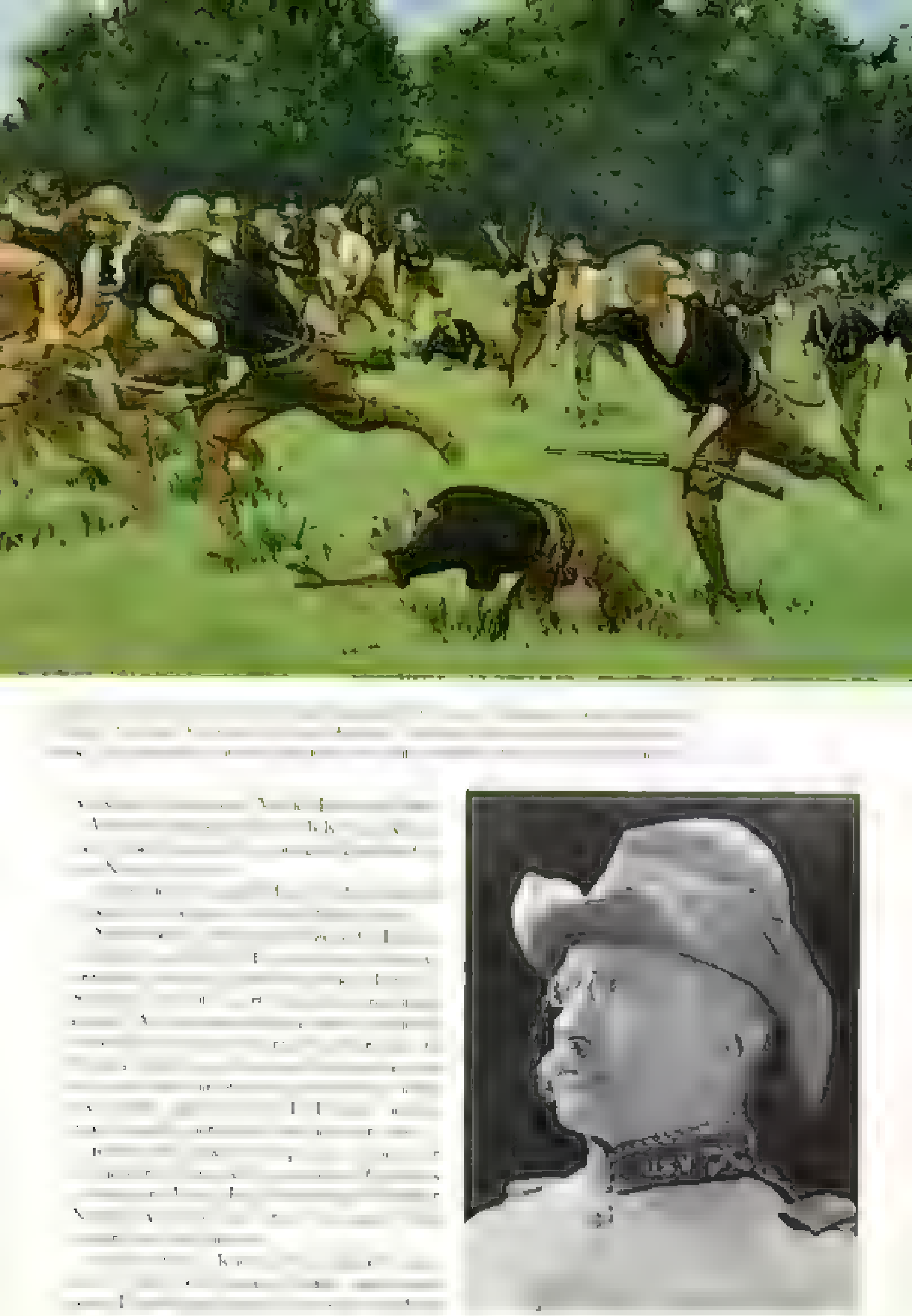
There were all kinds of things at which

Vice President—[illegible] Theodore Roosevelt became [illegible] Chief Executive [illegible] succeeded President McKinley on September 14, 1901. He had served as McKinley's Assistant Secretary of the Navy and governor of New York State, and two years later was elected Vice President. Entering the White House [illegible] "[illegible]"

Trust busting Teddy—[illegible] making much sport of [illegible] in American business. A New Yorker, the cartoonist caption[illegible] T. R.'s voyage [illegible] "[illegible] of great wealth." He [illegible] Wall Street but was [illegible] on Wall Street. T. R. Roosevelt [illegible] the prevailing [illegible]

Posing for John Singer Sargent. White House collection





[illegible] with the abuses of big business [illegible] not [illegible] the spirit in which [illegible] worked to the masses of their own [illegible] Roosevelt's ideal was to use the Govern[illegible] [illegible] forces in the Nation [illegible] between [illegible] each and dispensing favors to none. Thus he [illegible] as a "trust buster." He shared Ameri[illegible] pride in the enormous productivity of factories, with consequent high [illegible] but he realized that the abuses grow[illegible] of the new industrial combinations [illegible] trusts—must be curbed.

[illegible] vs. the Railroad Trusts

Roosevelt fought for legal [illegible] large [illegible] corporations [illegible] supervision of them. In 1903 [illegible] established a Department of Commerce and [illegible] Bureau of Corpora[illegible] to investigate [illegible] Roosevelt [illegible]

The first and most [illegible] the Government case against the Northern Securities Company, a great railroad com[illegible] in the Northwest. To the [illegible] J. P. Morgan of Wall Street, the Government won. The Supreme Court later [illegible] the decision to break up the com[illegible]

In 1906, Roosevelt proposed stronger Gov[illegible] regulation of the railroads. [illegible] maneuver[illegible] he obtained the Hep[illegible] Act [illegible] Interstate Commerce Commission [illegible]

Roosevelt's [illegible]

[illegible]

Roosevelt exuberance echo[illegible]

R[illegible] the White House. His [illegible] -in-law, Eleanor Alexander, recalled the [illegible] of the scene: "The Roosevelt family [illegible] [illegible] they trooped up the wide [illegible] staircase and went to their rooms [illegible] minutes all was still [illegible] just as I was dropping off to sleep [illegible] they remembered [illegible] they had [illegible] told each other [illegible] the [illegible]

[illegible] and dame [illegible] statesmen [illegible] He [illegible] a [illegible]

[illegible] in 1887 [illegible]

In dealing with labor problems, [illegible] [illegible] eight-hour day, a wage [illegible] Roosevelt had [illegible] [illegible] He believed [illegible]

In the spring of 1903, Roosevelt toured the West, noting in many places how the uncon[illegible] forests, minera[illegible] water was [illegible] our natural [illegible] He camped in Yosemite Park with [illegible] John Muir and became con[illegible] Muir's view that it could best be preserved under Federal control. With the aid [illegible] Californians, Roosevelt brought Yosemite under national administration [illegible] He added [illegible] to the national forests in the West, reserved coal lands and [illegible] sites for power dams for [illegible] and fostered great irrigation pr[illegible]

In foreign p[illegible] Roosevelt [illegible] United States [illegible] more active partici[illegible] in world politics. He [illegible] quote [illegible] West African proverb [illegible] go far. The "big stick" [illegible] American Navy which he [illegible]

Riding a steam shovel, the President in 1906 inspects a pet project, the Panama Canal. Crews worked on the strategic short cut between the Atlantic and Pacific for 16 years despite tropical heat, yellow fever, and opposition from Colombia, former owner of the Isthmus.

Staunch advocate of a strong Navy, Roosevelt dispatched 16 American battleships on a 14-month world cruise in 1907. The President used the spectacle of voyage of the Great White Fleet to impress potential enemies with United States naval might and to persuade Congress to authorize two dreadnoughts. Here, aboard the Presidential yacht *Mayflower*, Roosevelt reviews the fleet at Hampton Roads, Virginia.

"Last chance to be a boy." The work Fund in T. R. took him down rapids on Brazil's River of Doubt in 1914. Three men died; Brazilian Colonel Candido Rondon (center), co-leader with Roosevelt, lost a leg, and T. R. shortened his life with an abscess and jungle fever.

Camping conservationist, the President visits Yosemite National Park in 1903. Despite Although he [illegible] press for his [illegible] it was Roosevelt who set aside the first 51 wildlife refuges in the United States.

River of Doubt in the Amazon [illegible] of the trip he wrote: "No less than six weeks were spent in slowly and with great [illegible] toiling laboriously forward our way down through what seemed a literally endless succession of rapids and cataracts."

He did not relate that he himself had been [illegible] at one perilous point he even suggested that the others leave him behind to die. In a voice still weak with fever, Roosevelt gave his first public account of his Amazon trip in a lecture to the National Geographic Society.

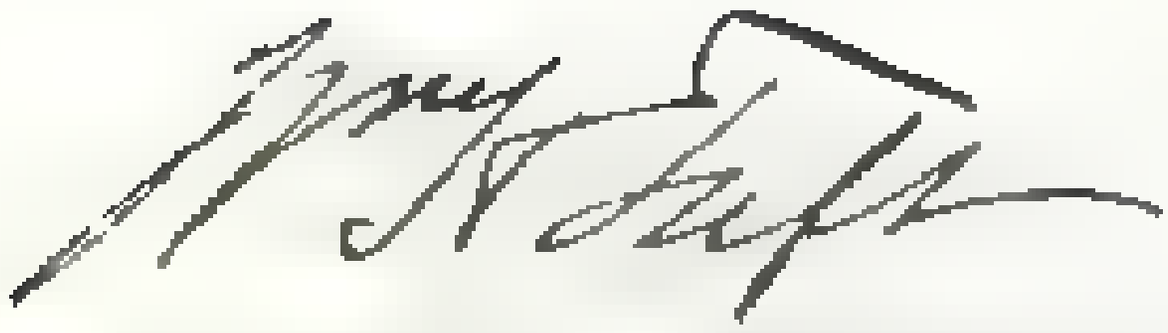
T. R. was proud of having put the River of Doubt (later named the Theodore Roosevelt) "on the map," as he phrased it. "I had to go. It was my last chance to be a boy."

But he had not ignored politics. By 1910, [illegible] New Nationalism [illegible] which [illegible] to the Progressive program. "[illegible] and for the square deal," he asserted. In 1912 he ran for President on a Progressive ticket, split off from the Republican Party which nominated Taft. To reporters he remarked that he felt as fit [illegible] and the new party became known as the Bull Moose Party.

Fanatic's Bullet Fails to Halt Speech

While campaigning in Milwaukee, a fanatic was shot in the chest by a would-be assassin. Insisted on speaking before being taken to the hospital. "The bullet is in me now," he told his audience, "so that I cannot make a very long speech. [illegible] I am ahead of the game anyway. No man has had a happier life than I have had, a happier life in every way."

Roosevelt recovered, but lost to Wilson in the election and was never able to resume fully the strenuous life he loved. He died in 1919 and was buried at Youngs' Memorial Cemetery (Oyster Bay, Long Island).



TWENTY-SEVENTH PRESIDENT [illegible]

W[illegible]

[illegible] the direction of the Supreme Court [illegible] than the Presidency. He achieved his fondest dream eight years after he left the White House becoming Chief Justice of the United States in 1921.

His four years in the White House were extremely unpleasant—primarily because he was caught in the middle of an intense battle between progressives and conservatives. Taft disliked resorting to political [illegible] but his worthy ends. He once [illegible] "Political considerations have never weighed here in with me. I have tried to [illegible] case what seemed to me the wisest [illegible]

As a result, Taft received [illegible] the conservatives [illegible] stroke. In [illegible] years before [illegible] other [illegible] and [illegible] that [illegible] Roosevelt's seven years in [illegible] and sacrificed [illegible] and tobacco [illegible] As a conservative [illegible] he reserved [illegible] acres of Federal lands [illegible] the [illegible] of Mines [illegible]

[illegible]

[illegible] s Bureau and a Commerce Court [illegible]

[illegible]

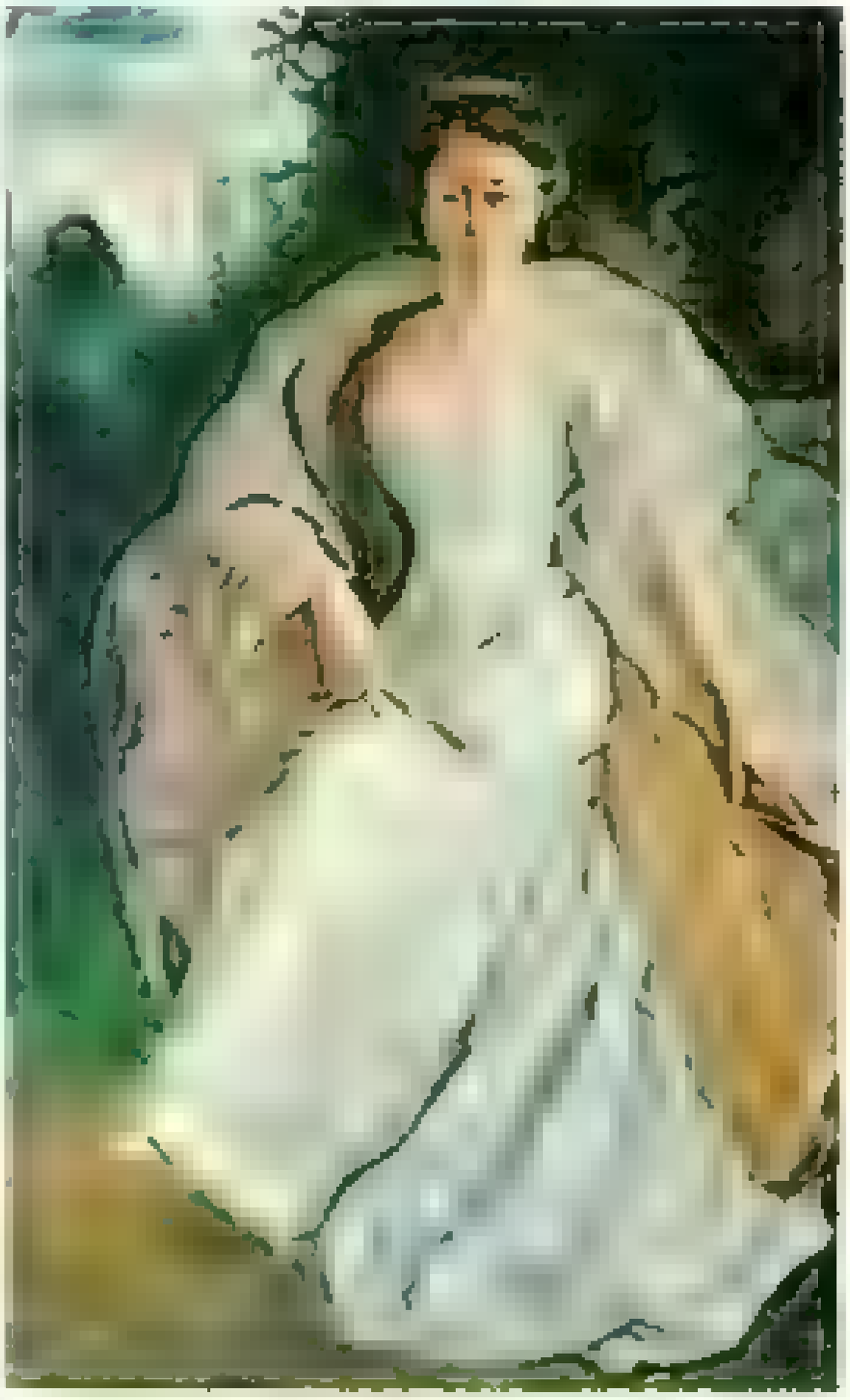
[illegible]

[illegible] tax [illegible] for [illegible] substantial record, but progressives [illegible] for [illegible]

President Defended Fledgling Society

In Taft, the National Geographic Society [illegible] He [illegible] before the Society [illegible] society ranging from the League of Nations to the Lincoln Memorial. He was [illegible] the first ex-President to become a Trustee of the Society, serving on the Board from 1917 until his death in 19[illegible]

Taft was born in 1857 in Cincinnati. He [illegible] well-to-do [illegible] Ohio [illegible] [illegible]



[illegible]

[illegible] Taft [illegible] before he [illegible] the White House [illegible] believed that [illegible] reward of the Presidency [illegible] this [illegible] was [illegible]

Continued [illegible] on Page [illegible]

Portrait by Andrew F. Rome [illegible] and Home Art [illegible]

Respect and affection bound Filipinos to Taft [illegible] four year tour of duty. Appointed first Civil Governor of the Philippines in 1901, Taft vastly improved [illegible] roads, schools and standard of [illegible]

Impressive delegates, beside the Secretary of War Taft, take a flat-car to [illegible] the Panama Canal. During [illegible] as Secretary, Taft championed the pro[illegible] The "big ditch" opened for business [illegible] War.

[illegible]

[illegible] ed availability, and because, as he once wrote facetiously, he always had his "plate [illegible]

[illegible] or their conservative legal scholarship. Taft [illegible] ared early to be a member of the Supreme Court, but his wife, Helen Herron Taft, held other ambitions for him.

His route to the White House was via ad[illegible]

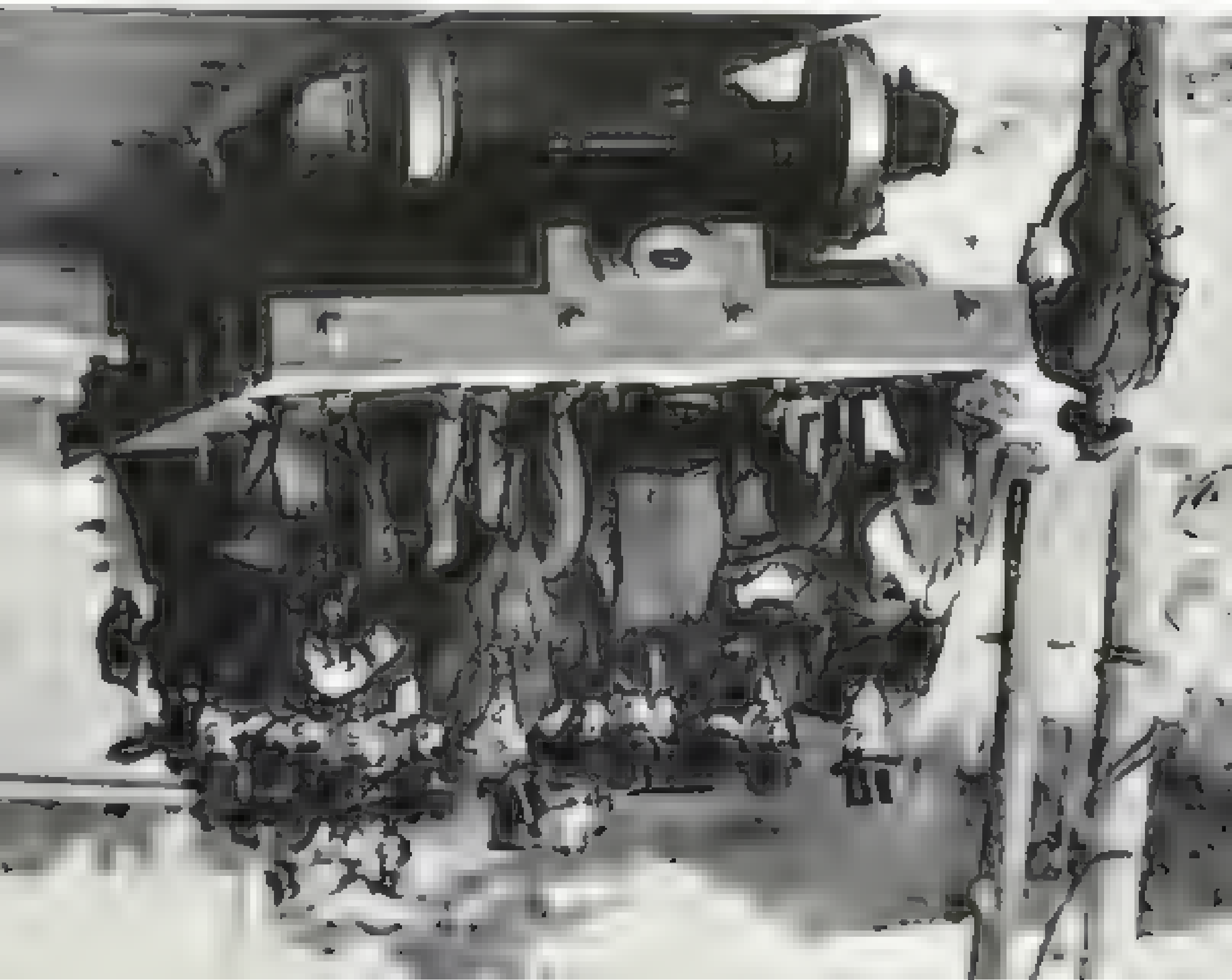
[illegible] participation in their government.

[illegible] flags, 6,000 men [illegible] marched [illegible] palace on January 10, 19[illegible]

[illegible] of among all of the factions in the islands. Pedro A. Paterno, whom Taft had been forced [illegible] the light and life of modern liberties.

Bryan Faces Two Tafts

President Roosevelt brought Taft to Washington in 1904 to be Secretary of War and [illegible] four months of my life." He pledged his fea[illegible] to the West, while his brother Charles Taft assured eastern Republicans they had nothing



Earl Carter President

Author is at what all our worst ap.

Woodrow Wilson

[illegible] PRESIDENT

WOODROW WILSON was a great [illegible] peace who insisted that the United States must share responsibility for maintaining [illegible] order. In his first term he brought to final [illegible] reforms, he mobilized the manpower and indu[illegible] democracy."

[illegible] he Leagues and frustrated his dream.

Perhaps because his earliest memories were of the Civil War, Wilson's most earnest wish was for permanent peace. He was born [illegible] Presbyterian minister who during the War had a church in Augusta, G[illegible] during Reconstruction taught theology in [illegible] Theo[illegible]

At [illegible] Post [illegible] now Wilson memorial museum.

Wilson was [illegible] in the traditions of the South; he was proud the Confederates had fought, but glad the Union had survived.

A Notewortheir Mar[illegible] Esters Politics

[illegible] and attending the University of Virginia Law [illegible] University, he began an academic career. His home, as he told his future wife Ellen Louise Axson, was to move on to statesmanship. As a new student he had es[illegible] distinguishing calling cards. "Thomas Woodrow Wilson, Senator from Virginia."

Wilson rose rapidly as a conservative professor of political economy, popular both in the classroom and as a writer. Although [illegible]

Quest for peace [illegible] Woodrow Wilson [illegible] been the [illegible] [illegible] as a child during the Civil War. But destiny cast him as [illegible] President. He came to the White House on [illegible] in Europe. His Ame[illegible]

Childhood friend [illegible] President [illegible] when the family moved to the White House [illegible] As First Lady, Ellen [illegible]

(Courtesy Bettmann Archive)

[illegible] described him [illegible]

[illegible] such saw his [illegible]

[illegible] well shaped for a man, and a warm [illegible] most brutal strength of the general bony structure of the face and that aggressive jaw promise an active, iron willed, fighting man."

[illegible] the university into an eminent intellectual institution. Faculty and students received [illegible] students. The resulting unrest perhaps influenced his [illegible] New Jersey [illegible]

[illegible] the six extensive progressive platforms. As [illegible]

pushing New Jersey into the vanguard of the [illegible]

After a stiff fight at the 1912 Democratic Convention, he was nominated for President [illegible] stress on individualism and states' rights than [illegible] Nationalism. It was a New Freedom [illegible] Wilson for "the man who [illegible] fighting at the closed door [illegible] In his three years in office [illegible] of electoral [illegible]

Wilson Defines an Idealistic President

In his first inaugural Address, President Wilson [illegible] the use of the Government of the private [illegible]

Wilson followed with a bill of particulars [illegible] be translated [illegible] Wilson, like [illegible] himself as the personal representative [illegible] "No one but the [illegible]

Wilson fully maneuvered through Congress three major pieces of legislation. The first was a lower tariff, the Underwood Act, which he obtained despite lobbies and logrolling. In support of the bill, he appeared in person to deliver a message to Congress, the first President to do so since John Adams. A [illegible]

Next Wilson [illegible] great importance. He [illegible] has provided the Nation with the money supply it badly needed by creating a regional "bankers' banks," supervised by a board in Washington. In 1914 he [illegible] establishment of a Federal Trade Commission to guard [illegible]

Courage and stubbornness marked his years as Chief Executive [illegible] Wilson's work [illegible]

Versatile helpmate, dark-eyed Edith Bolling Galt married the widowed Wilson in 1915. Ill and unfamiliar with the 18-hour workdays of the war, she became both nurse and executive secretary after a stroke crippled the President in the fall of 1919.

In gratitude for Belgian relief, entrepreneur Herbert Hoover sent this clear sack from a Westphalia Washington, Indiana, seed firm to Wilson.

[illegible] as well as personal shrewdness, he took up the reins of the [illegible] Moderates regarded as the crowning excesses of federal [illegible] was one to end child labor, [illegible] of the National [illegible] a law later invalidated [illegible] Supreme Court in a decision [illegible] subsequently overruled. Another law limited [illegible] railroad workers to a maximum [illegible] By virtue of his domestic [illegible] and his [illegible] "He kept us out of war." Wilson narrowly won re-election over Charles Evans Hughes.

Wilson [illegible] both great happiness and [illegible] now in the White House. During the early months, surrounded by the wife he [illegible] and three grown daughters and other [illegible] in Southern relatives, he would frequently [illegible] within the circle singing at the piano, playing [illegible] games, including one of foot-shaking. Theodore Roosevelt died in August, 1919. Mrs. Wilson [illegible] and Wilson was broken-hearted.

Edith Galt Helps Relieve the Burden

Without his wife he seemed lost until he met a charming widow, Edith Bolling Galt. They were married in December, 1915.

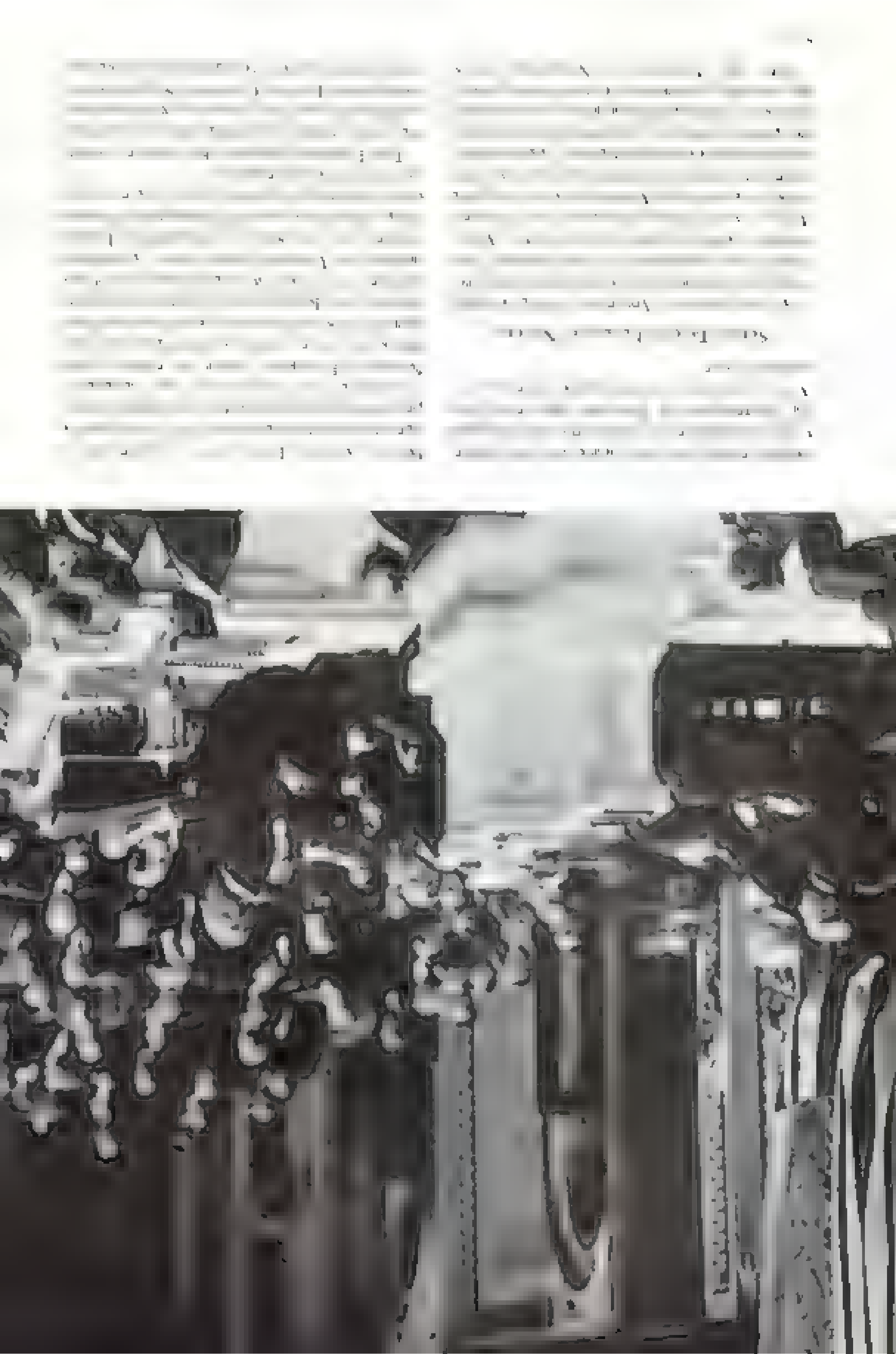
He revived [illegible] "comparionship, strength, and joy," W[illegible] secretary, Arthur S. Link, has written. Her [illegible] made him whole.

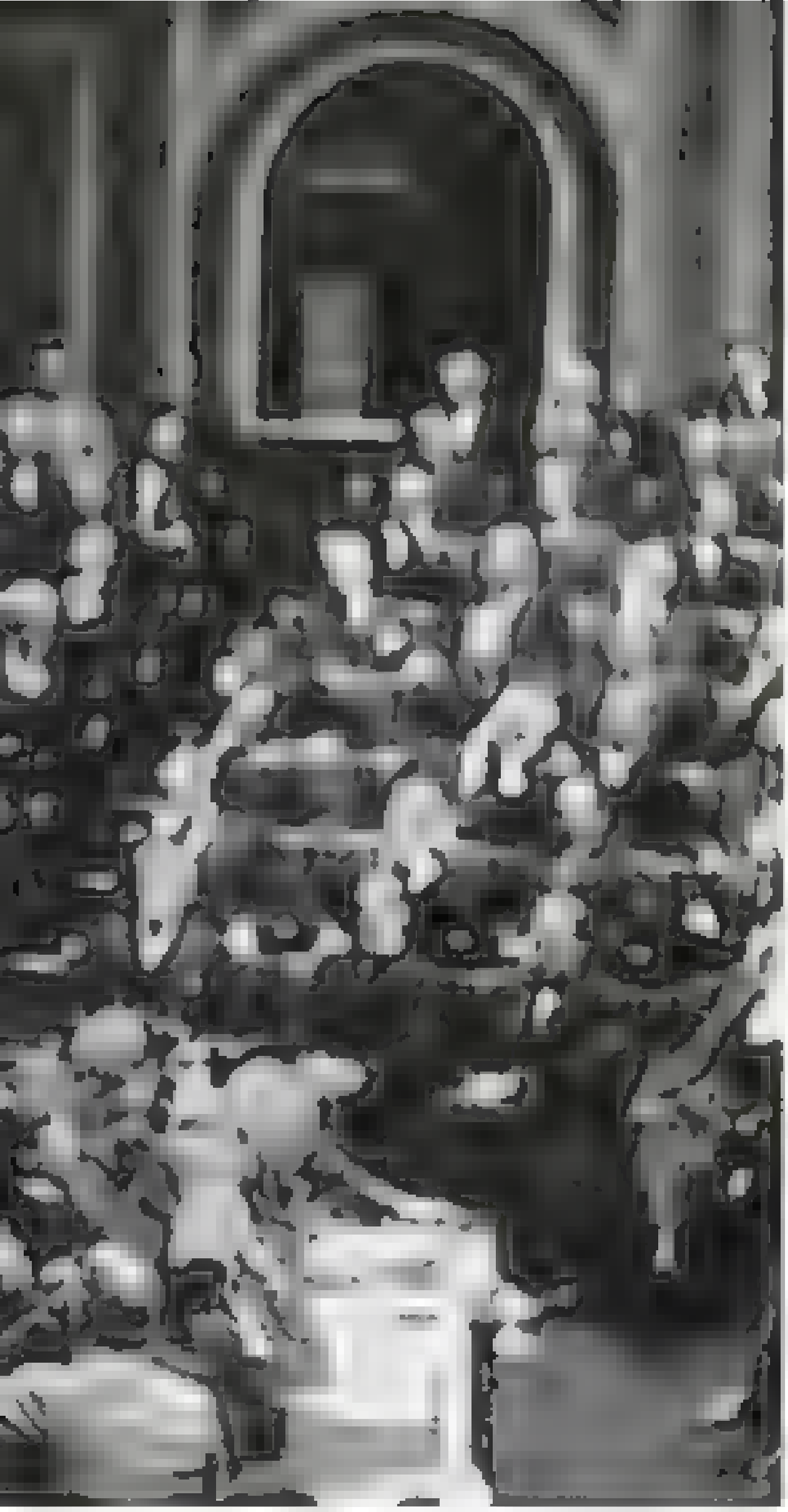
Throughout his years in the White House Wilson worked [illegible] hours a day and eight. He drafted his own speeches, [illegible] and correspondence [illegible]

As the war in Europe impinged [illegible] upon the United States, Wilson's burdens became heavier and heavier. He had [illegible] the American p[illegible]

struggle to maintain the Nation's neutral rights on the high seas. In 1916 against [illegible] and Wilson had prepared [illegible] program enlarging the Army and gradually increasing the size of the Navy.

From the war's beginning Wilson hoped for a just peace, and as late as January, 1917, he called for "peace without victory." [illegible] threatened [illegible] by German [illegible] knowing this act would [illegible] Wilson [illegible] clearly convinced that Germany was floating America





Warren G. Harding

TWENTY-NINTH PRESIDENT

WARREN GAMALIEL HARDING, a well-meaning man, promised a Nation troubled by the pollution and casualties following World War I that he would take it back to "normalcy." But there was to be no turning back from the profound economic and social changes that the war had wrought. Harding, naïve in some of his appointments, was betrayed by corrupt friends and died in deadlock and disgrace before the end of his term.

He was born in the Ohio village of Blooming Grove in 1865, the son of a farmer and small-town homeopathic doctor. After graduation from Ohio Central College, Harding became at 19 the publisher and co-owner of the Marion (Ohio) Star. As the little town of 4,000 steadily grew and prospered, so did the Star and Warren Harding. In 1891 he married Florence Kling DeWolfe, a wealthy banker.

Convention Deadlock Leads to Presidency

Tall, handsome, and skillful, Harding was readily suited to the most prominent of roles.

Also on his side was his understanding. Republican, warm and vibrant, speaking with more political skill than he been generally recognized, carried him far. He served in the state Senate and in 1902 became Lieutenant Governor of Ohio. He delivered the nominating address for President Taft at the 1912 Republican Convention, and in 1914 he was elected to the United States Senate, which he found to be "a very pleasant place."

An Ohio admirer, Harry Daugherty, began to promote Harding for the 1920 Republican nomination because, as he said, "He looked like a President."

When the principal candidates for the Republican Convention in deadlocked, Harding was chosen as the nominee. The issue of "normalcy" became the theme of his campaign. He declared, "Americans present need is not heroics, but healing, not nostrums but normalcy, not revolution but restoration, not agitation, but adjustment, not surgery, but serenity, not the quest of the romantic, but the distinction of the practical, not experiment, but experience, not sensation, but assimilation, not world supremacy, but self-possession, not the idealistic, but the practical, not the theoretical, but the tested, not the untried, but the familiar, not the complex, but the simple, not the artificial, but the natural, not the political, but the moral, not the material, but the spiritual—not a nation for sale, but a nation not to be sold."

A month before the election, weakness of such strong opposition was effective. While the Democratic candidates, Governor James M. Cox of Ohio and Franklin D. Roosevelt, urged support for the League of Nations, both opponents and proponents of American entrance into the League could find in Harding's speeches reasons to vote for him. Most voters, however, were chiefly interested in protesting the unpopular Democratic Party administration. Harding received 61 percent of the popular vote.

"He looked like a President." [illegible] Florence said of Warren Harding. [illegible] when he first [illegible] Governor [illegible] disillusionment after [illegible] years in office.

> I have only one real hobby—my husband. [illegible] Florence Kling DeWolfe Harding. And [illegible] she helped him in the [illegible] for the quiet question periods [illegible] the White House [illegible]

[illegible] by [illegible], [illegible] Photo Company

[illegible] choosing such distinguished men as Charles Evans Hughes to be Secretary of State and [illegible] Unfortunately he also appointed some other [illegible]

Despite the pleas of Hughes, President [illegible] Conference on the Limitation of [illegible]

[illegible]

The United States thus [illegible] the Pacific, and in so doing prepared for its [illegible]

With similar skill, Secretary Hoover [illegible] interests of small business. Further, he per[illegible] week, then six in eff[illegible]

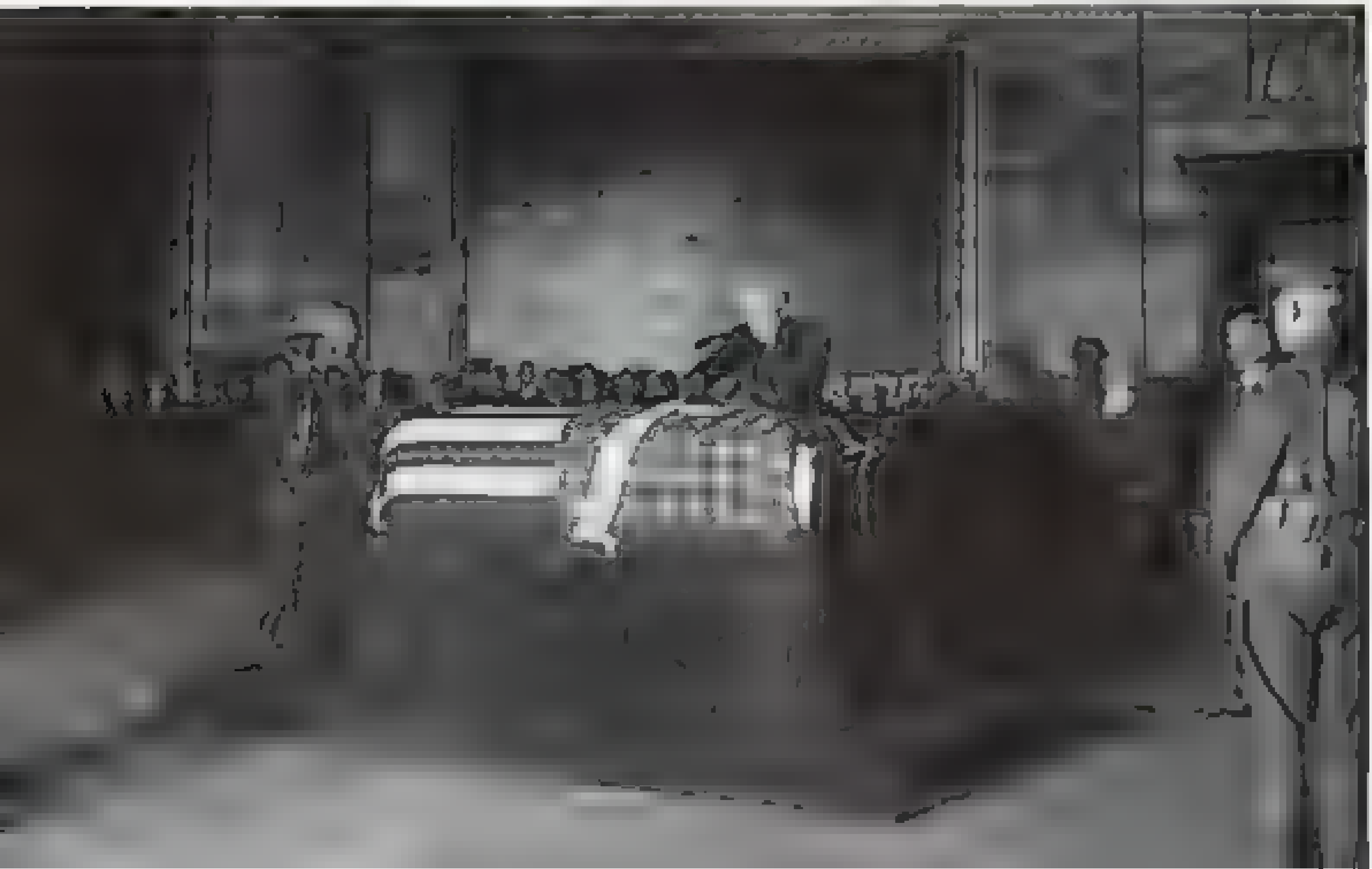
Republicans in Congress easily continued the [illegible] wartime controls and slashed taxes, established a Federal budget system, restored [illegible] immigration. By 1923 the postwar depression seemed to be giving way to new prosperity, and newspapers hailed [illegible]

[illegible] Harding [illegible] Grave

[illegible] atmosphere of a rural county seat. Wo[illegible] during the [illegible]

Fortunately for himself, Harding did not have to face the public [illegible] Teapot Dome affair, concer[illegible] of his administration. On August 2, 1923, he [illegible] the time th[illegible] the damage to the Republican Party wa[illegible]

Harding was buried at Marion, and [illegible] there marks his burial site. His Marion [illegible] is a national historic landmark.



[illegible] led [illegible] scott spring [illegible]

[illegible]

FURTHER PRESIDENT [illegible]

Found New Evaluation, Coo[illegible]

[illegible]

Lighted by this lamp, [illegible]

[illegible]

C[illegible]

[illegible] Coolidge [illegible] role of Government [illegible] the business of Ameri[illegible] business

[illegible] Plymouth, Vermont, on July 4, 1872, Coolidge was the son of a hard-working village storekeeper. Four days before he was born, and his father's salary up [illegible] "My boy was always shy and quiet like and never put himself forward," his father later reminisced. "Calvin could get more sap out [illegible] tree than any of the other [illegible] around here."

Coolidge was graduated from Amherst College with honors, and entered law and politics in Northampton, Massachusetts. It was [illegible] that he met Grace Goodhue, who became his wife in [illegible]. "She has kept me in money for pulling wire ever since I married her," Coolidge jested in later years. In truth, as Mrs. Coolidge wrote, she had at times protested against [illegible] the political [illegible] over the years he wore [illegible] office, ranging from City Solicitor of Northampton to Governor of Massachusetts. Politically he became [illegible] a conservative.

Strike Stand Leads to White House

Long a merchant [illegible] Wilson [illegible] 1919. He [illegible] once that [illegible] went to [illegible] Legislature, he supposes he was [illegible] in favor [illegible] social legislation. There came a time [illegible] of his least popular experiences when he came to [illegible] resolutions [illegible] were wrong but that Massachusetts, as a state, was going too fast. As he put it, legislation [illegible] outpace the ability to administer. He felt that [illegible] measures [illegible] would take years [illegible] as it might take [illegible].

[illegible] the view of the Federal [illegible] had been enacted and that it was up to him to enforce it.

Coolidge first became a national figure during the police strike of 1919. When Samuel Gompers, president of the American Federation of Labor, urged that the strikers be re-employed, Coolidge stated, "There is no right to strike against the public safety by anyone, anywhere, anytime." When the nomination of Harding for President at the Republican Convention in Chicago appeared deadlocked, party leaders authorized Governor Coolidge for Vice President.

In the early morning hours of August 3, 1923, while visiting his father in Plymouth, Coolidge received word that


Keep
Cool-idge

[illegible] was dead, and the House was [illegible] by the light of a kerosene lamp. His father, a [illegible] notary public, administered the oath of office. The Coolidge homestead [illegible] exhibit place appears today much as it did then. In the [illegible]

[illegible] been known that [illegible] in the [illegible] and is adorned [illegible] made it a Democrat [illegible] Smith wrote [illegible] task was to restore the dignity and prestige of the Presidency when it had reached the lowest ebb in our history [illegible] of extravagance and waste [illegible] example of the simple and [illegible] came down to us from New England ancestors.

Coolidge Untouched by Harding Scandals

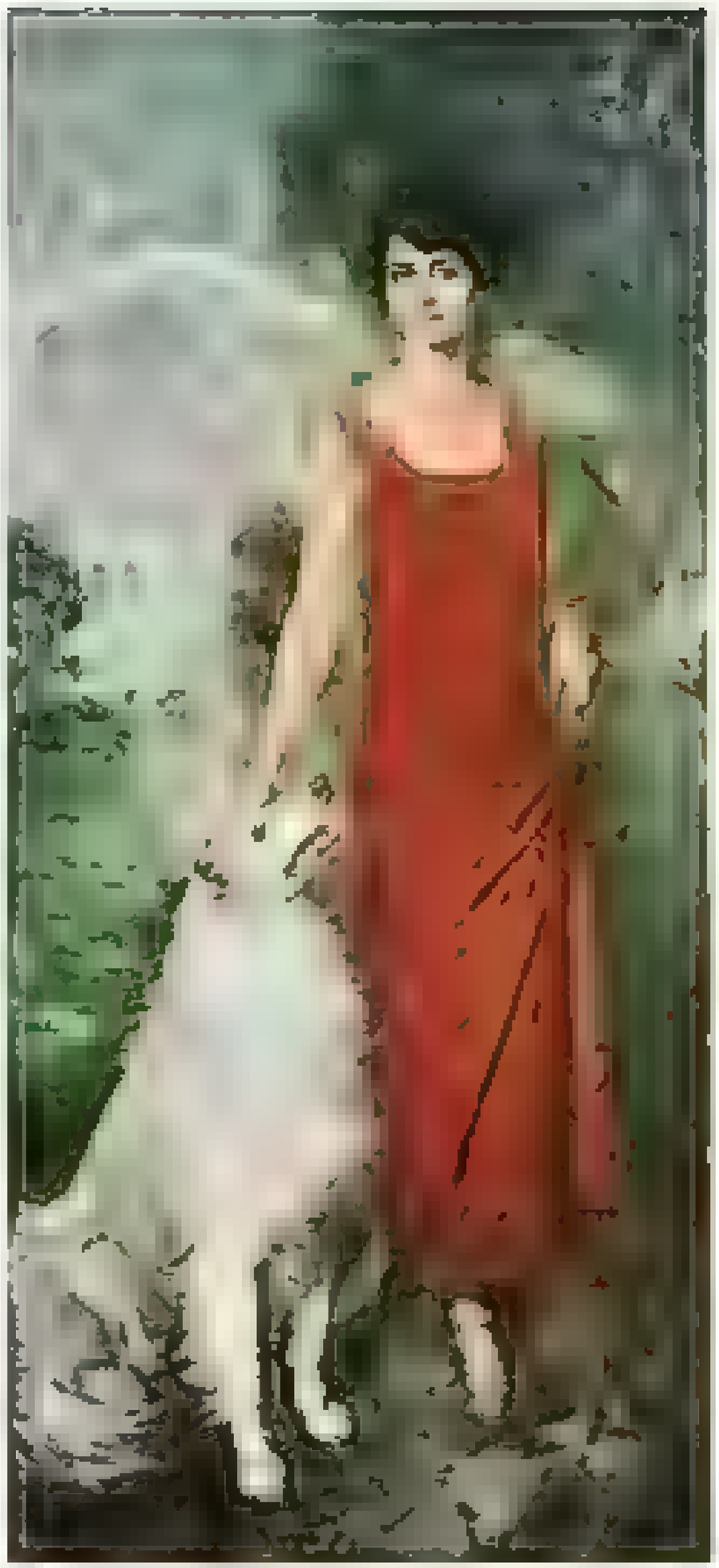
President Coolidge was determined to [illegible] and the Nation's material prosperity [illegible] Government [illegible] and did not believe that Government was the solution to the depression in agriculture and certain industries. His first message [illegible] December [illegible] foreign policy of attending to our own affairs." [illegible] limited aid to farmers. It was hailed as Clay [illegible]

Coolidge caption books became so popular that [illegible] were produced [illegible] exposed [illegible] to damage the Democratic [illegible]

Republican Party [illegible] Coolidge's present [illegible] eated Jean W. Davis, winning 54 percent of the [illegible] In his Inaugural Address [illegible] the New [illegible] had [illegible] to maintain the status quo. He [illegible] two farm relief bills and Senator George [illegible] McNary's scheme to provide them for the party [illegible] over on the farm vote. Kind [illegible]

In a speech at the Laughlin's [illegible] Coolidge formulated [illegible] the conservative [illegible]

[illegible] however some people had that [illegible] Coolidge's remedies themselves [illegible] would have [illegible] sent [illegible] from Washington [illegible]

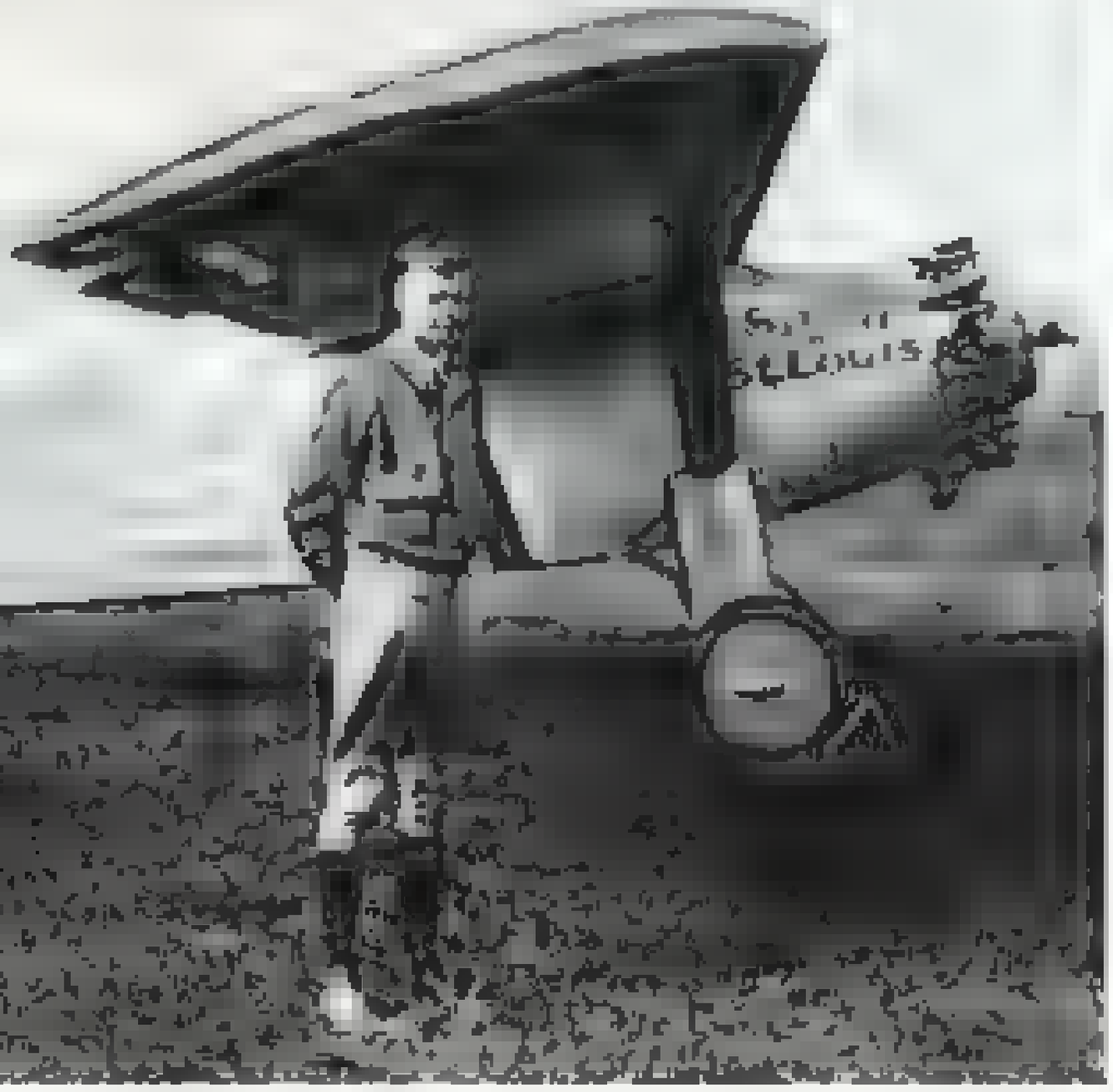


Grace Goodhue Coolidge, shown [illegible] Edward Bok as she [illegible] the Coolidge School [illegible] Northampton, Massachusetts, where [illegible] the future President.

[illegible] Alfred E. Smith in 1928 sought to [illegible] on the success of the Coolidge [illegible] business interests which [illegible] [illegible] Agriculture [illegible] has become [illegible] and [illegible] has become [illegible] complicated [illegible]

President Coolidge himself [illegible] When [illegible] [illegible]

Coolidge [illegible]


ST. LOUIS

THIRTY-FIRST PRESIDENT

HERBERT HOOVER was forced as President to cope with an severe world-wide depression. Unlike our other depression Presidents, he used Government resources to help [illegible], but his people lost and evaporated and he was defeated in 1932. In later years he was again hailed as an outstanding American leader.

Few men have lived such long exciting lives. The son of a Quaker blacksmith, Herbert Hoover was born in West Branch, Iowa, on August 10, [illegible]. His father died when Herbert was six, his mother, two years later. He went to live with an uncle in Oregon, where he earned not only his own keep, but also how to type and keep books. He was one of the first students to enroll at Stanford University when it opened in 1891, and at 23, in the midst of a depression, he was graduated with a degree in geology.

He quickly demonstrated his analytical and organizing talents and at 23 took charge of some gold mines in the Australian desert. He developed one of the richest of all, for some of Lew Janeway

Future Career Begins at 40

At 1899 he became the [illegible] mining expert to the Chinese Government. En route to China, he stopped in Calcutta to marry his Stanford sweetheart, Lou Henry. In June 1900, the Boxer Rebellion ran amok, the couple in Tientsin [illegible] assumed responsibility for the civilians and for [illegible] food and water in the helter-skelter general [illegible].

In the early 1900s, Hoover had [illegible] in the mining industry. He developed great properties in Australia and Burma, [illegible] established offices in Russia. When the chief accountant for a firm of British mining consultants, in which he was a [illegible] partner, embezzled a million dollars, Hoover in the absence of his sen or partners, decided that the firm would make good the loss even though it was under no legal obligation. He personally assumed a substantial share of the loss, wiping out the greater part of his life's savings. The firm's reputation, as well as Hoover's personal standing, were greatly enhanced, and the incident became a legend in mining business circles.

A week before Hoover celebrated his sixth birthday in London, Germany declared war on France and the American Consul General asked his help in getting his citizens home.

"I did not realize at the moment," Hoover later recalled, "that this was the beginning of a period of my life in which I should be engaged in a series of services to my country and to the world."

Brilliant mining engineer Herbert Clark Hoover had amassed a great fortune when [illegible] Wilson appointed him [illegible] Food Administrator and Director of Relief. He [illegible] as Secretary of Commerce. As the powerful [illegible] he [illegible] waste of war, [illegible] the distressed and suffering [illegible] acceptance [illegible] Presidential [illegible] in 1928, he declared: "I think I know [illegible] what I have witnessed as [illegible] horror and suffering of war as an [illegible] American. [illegible] I have developed a deep passion for peace."

Lou Henry Hoover spoke two languages [illegible] She helped the White House with [illegible] Mrs. Hoover was a [illegible] member of the National Geographic Society, her [illegible] served among [illegible] members [illegible] the January [illegible]

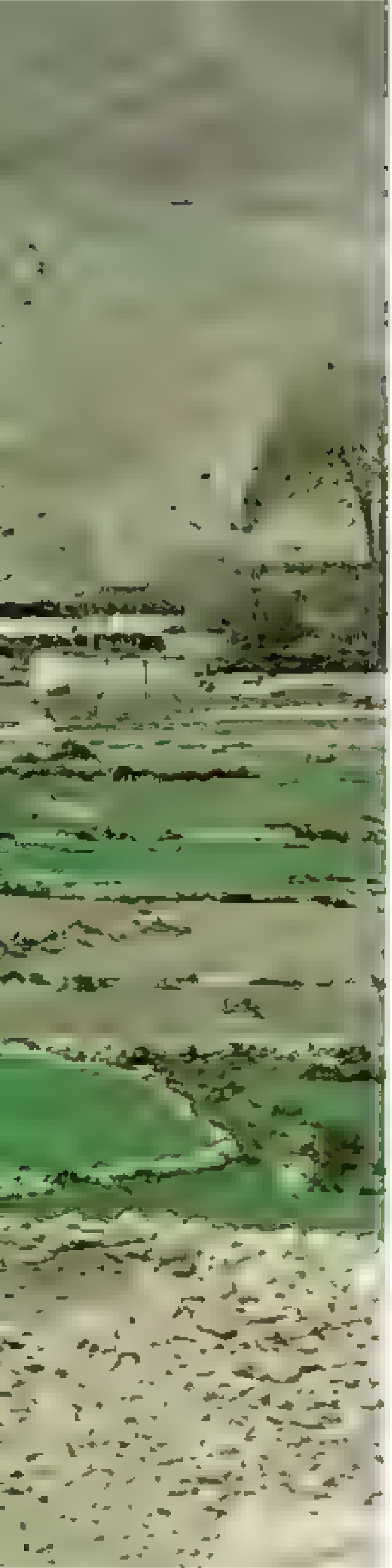
Paintings by Edward W. Greene [illegible] and Richard Bergen after photographs [illegible] Herbert Hoover Library


EUROPEAN
RELIEF

[illegible]

[illegible]

[illegible]



MUSTANG, Remote Realm in Nepal

Article and photographs
BY MICHEL PLISSET

TWO YEARS of preparation, 850 pounds of food and equipment, and I had forgotten the horses. When [illegible]

Tashi, my Tibetan companion, looked at me with [illegible] approval. The two small horses that the King of Mustang had sent to Pokhara were waiting.

Furthermore, an old monk agreed to sell me a kata, the narrow white ceremonial silk scarf necessary for a [illegible] with the king. Tashi had a relative in Tibetan robe. I mounted a pony, and, with Tashi, rode out of La Mang[illegible] capital of Mustang, by the town's only gate. [illegible] rocky flats we galloped onto a barren plateau. Two hours later, we reached the king's summer palace.

Mi bat Surrounded by Red-hued Tibet

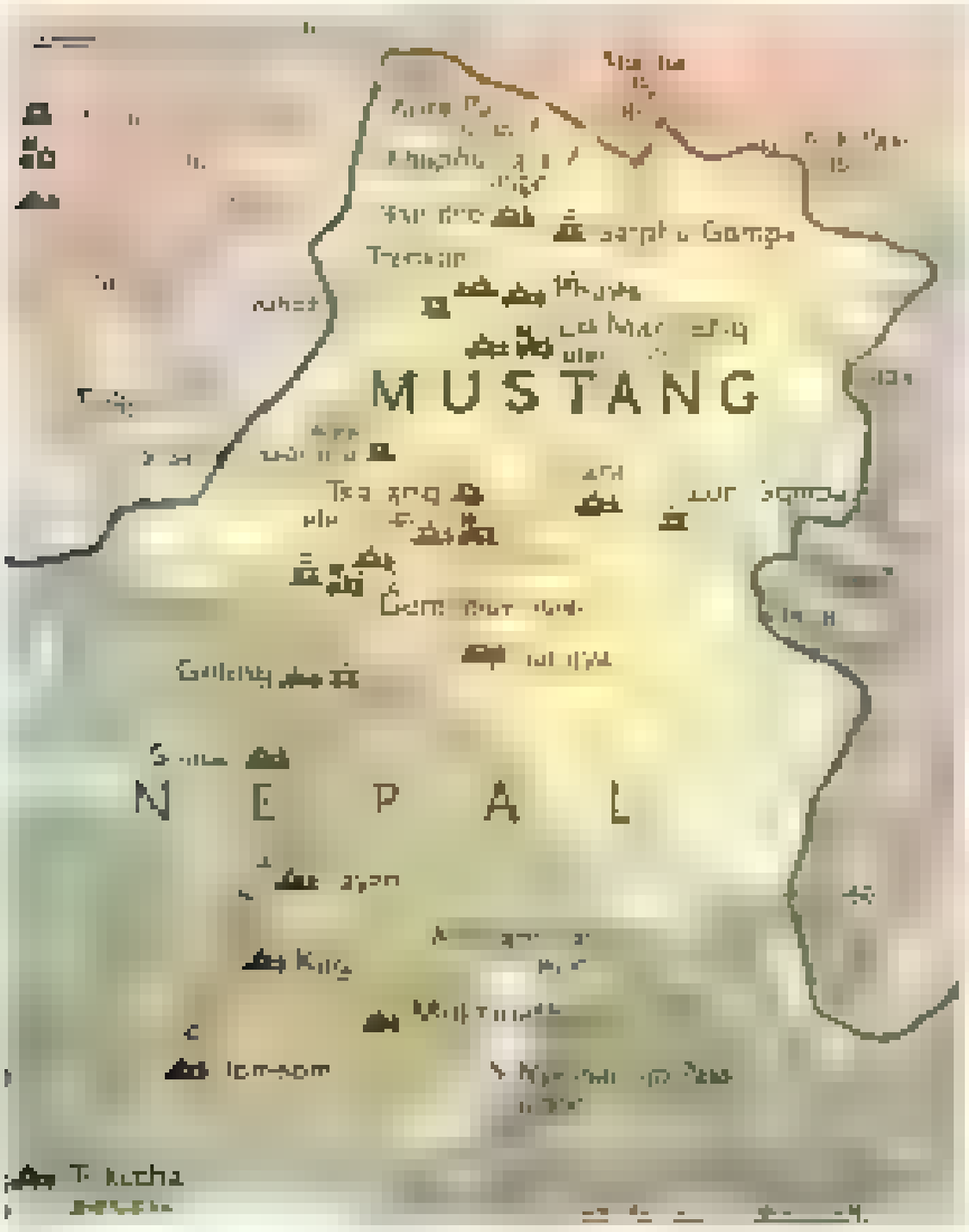
While we waited, Tashi helped me astride now I should present the scarf, extend up my right arm with reserve [illegible] without a kata would have been [illegible]

[illegible] cross-legged at the foot of a wooden throne. I learned that Tibetan-speaking Angun Tenzing Trom[illegible] king of Mustang, had [illegible] what it was I [illegible] For him and his people, the world [illegible] and in the [illegible]

Was it more surprising, I wondered, [illegible] that the outside world is now aware of Mustang's existence? Jeden, perhaps 26,000 feet, [illegible] seventh highest peak in the world, [illegible] the great Annapurna massif. Mustang is [illegible] by Communists occupied Tibet. Only 780 square miles in area, Mustang [illegible] at a staggering mean altitude of some 15,000

Gateway to the past: Town of Tsarang marks halfway point of the author's ten-week expedition to forbidden Mustang, land of lamaseries and lamas. His coming [illegible] a dear [illegible] made it [illegible] a handful of Westerners [illegible] the remote kingdom in Nep[illegible]


MUSTANG


MUSTANG
NEPAL

[illegible] ok I with the [illegible]

[illegible] a train the Hindu reach [illegible] the Nepal administer [illegible] border is kingdom [illegible]

[illegible] ernment has seldom permitted for [illegible] enter Mustang [illegible]

[illegible] me on Nepal's high Himalayan border with Tibet. One of the few Westerners ever admitted to this tiny mountain state was Toni Hagen, a Swiss geologist who visited its capi [illegible]

Chinese completed their conquest of Tibet, Mustang more than ever [illegible]

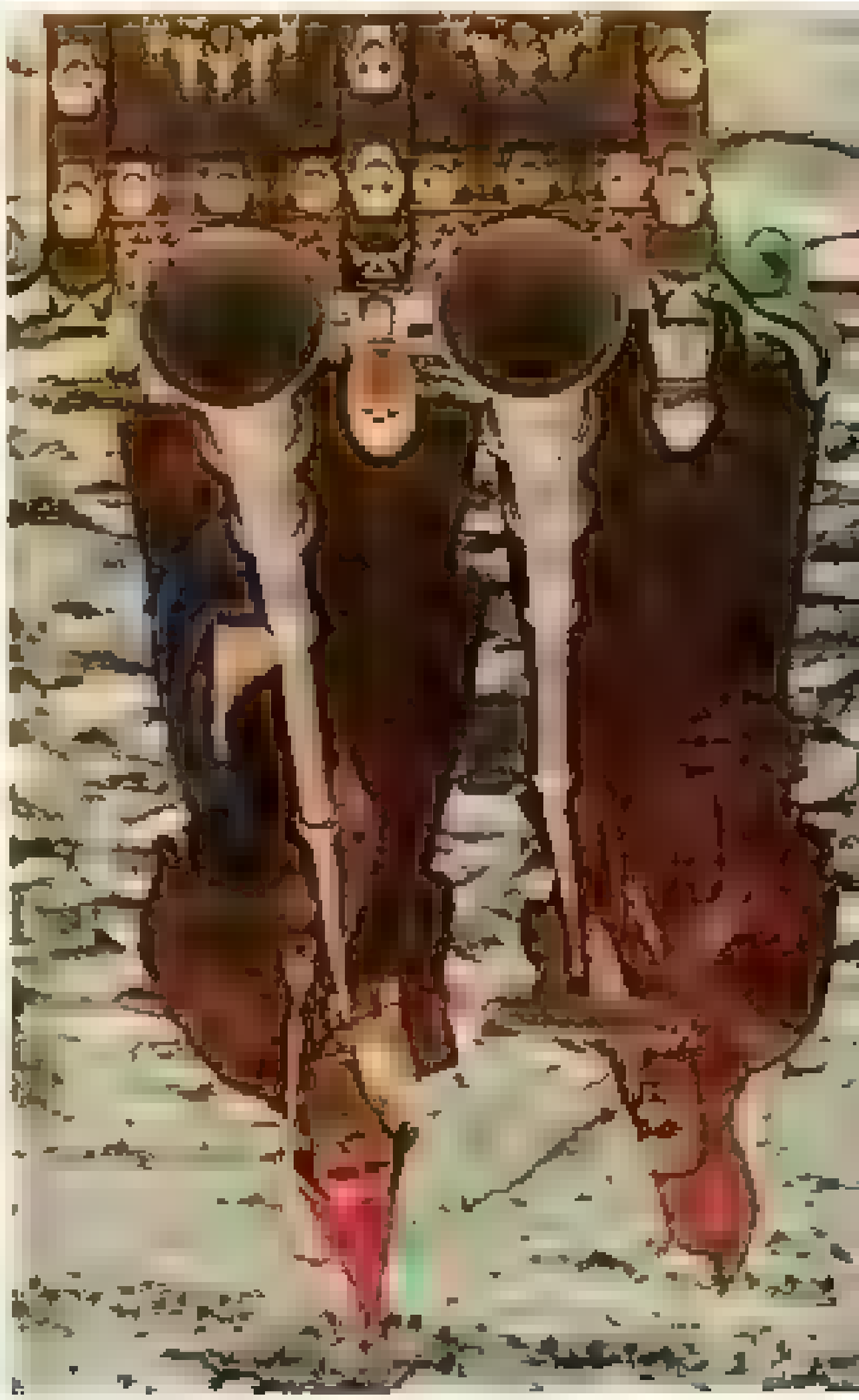
At Oxford University, and with the a [illegible] I came to [illegible] School of Oriental [illegible] Studies. I had planned a st [illegible] in Western Nepal [illegible] Hima [illegible]

Colon Wounds in Experimental Measures on Armored Concrete

[illegible]

[illegible]

TIME HANGS FROZEN in perpetual La Montana. The king still opens serfs who tell his lands and may not leave their master, just as when the warlord Aona Lal founded the kingdom in the 1,300s. At night footmen close a single gate in the 1,[illegible]-k, ancient walls to keep out marauders



Knocking Down Walls for Brand Work

"Is France near Lhasa," asked the king, "or the islands of America?" I was then learned he was unknown to the outside world.

The king asked innumerable questions [illegible] the history of your religion and its rooms, to see its books and scripts [illegible] Chinese and the Mustangese.

I asked a [illegible] I answered: "I do not know [illegible] was not a govern[illegible] I am sure the Chinese will bom[illegible] Nepal," I added, [illegible] agreement that reaffirmed Westerner's occupation within Nepal.

"I and my people are afraid of the king and we hear great explosions from Tibet that [illegible]."

[illegible] I later learned that the [illegible] of a Chinese [illegible] and we saw [illegible] he left [illegible] Some of the La[illegible] [illegible] Beyond the border. The king may not know that [illegible] but he is well aware [illegible] may be thrown into today's [illegible] in Asia.

As our interview neared its end, the king [illegible] Coming forward, the monarch had kn[illegible] then the ground, and finally prostrated hi[illegible] stick and a flask of [illegible] from the fol[illegible] he began to write on a large piece of [illegible] brown paper as he k[illegible]

"I request that these two foreigners [illegible] and I, who are one person, [illegible] stance and their questions [illegible] every [illegible] of his realm."

The [illegible] with a [illegible] of red ink [illegible] seal to the bottom of the page. He then point[illegible] up as [illegible] scattered [illegible] "This is my son. He [illegible]

[illegible] and [illegible] He had just returned from Katmandu. Beyond [illegible] he had taught [illegible]

Straw-stuffed pelt of a snow leo[illegible] [illegible] wall as a [illegible] for the hunter. In [illegible] [illegible] Tangyes pelt [illegible] enter the [illegible] of Mustang [illegible] The [illegible] largest [illegible] [illegible] peaks, alone set [illegible] [illegible] and [illegible] of [illegible]

[illegible]

[illegible]

According to the old treaty, Mustang belongs to the Nepalese authorities.

[illegible]

We were crossing from the Mustang side

[illegible]

[illegible] Women and girls wear gowns with puffed sleeves, but men—especially in the western [illegible]—wear the wide wool [illegible] strands to make their knee-high boots.

Wherever I went I was escorted by a [illegible] of onlookers [illegible] which I had never before [illegible] in a foreign [illegible]. No matter [illegible] each piece and parcel, even the texture of my dent, grownups would fight over the empty [illegible] I threw away. Mail [illegible] are unknown; everybody has his own flint and steel.

Mustang, I discovered, is almost [illegible] and [illegible]. The very name is derived from the words *Mon Thang*, meaning "the plain of prayer." Some 600 of the land's 8,000 [illegible] lamas are monks. The state religion is Lamaism. Its dogma of [illegible] is very similar to the Bodhisattva of the Tibetan Lamas.

In Mustang stand some of the most remarkable monasteries left outside Tibet. At least two had been served in the past by as many as 1,000 monks. Three of the monasteries were erected [illegible] years ago, [illegible] hewn in the rock.

Demons Haunt the Mountain Kingdom

Twenty-seven hundred monks, 152 fairies and eight practicing witches sleep every night within the great sheltering walls of Le Mustang. With the town's [illegible] I expected that everybody would slumber quietly. This is not so. The entire population goes to bed in fear.

It is not [illegible] the Chinese soldiers nor the Khamba that worry the townspeople, but the wild demons in land, sky, fire and water.

Thousands of expedients have been employed to fend off these evil spirits that cause the 108 known diseases as well as the five forms of violent death. Butter lamps burn before altars in the private chapel of every residence; monks, priests, and peasants recite prayers throughout the day; thousands of prayer flags flutter on poles; prayer wheels and prayer walls clatter every [illegible].

But still the spirits prowl, especially at night. Even the [illegible] demon traps set in every house place [illegible], and the horse's skull [illegible] buried below each doorstep cannot stop them. When the sun sets behind the [illegible] and sinks into the west, no resident is truly safe.

On the first day of the fourth lunar month of the Tibetan calendar, May 13, 1964, I was awakened by the shrill sound of a whistle. The noise came from a flute made of a human leg bone—an instrument frequently used by monks. From the flat roof of my house I gazed down upon a ceremony unfolding in the town square. It was to last three full days, during which time no sound or even a shadow could be marked on me. I drained some tea from a human skull. This was the ritual "[illegible]" at the beginning of the New Year but dressed for some reason as never [illegible].

The square had the appearance of a [illegible]. Monks sat on red carpets, and more than 60 of them assisted the High Lama of Le Mustang, who officiated dressed in a [illegible] decorated with dragons and human skulls. A sturdy "[illegible]" monk paraded the crowd of onlookers in his [illegible]; instead of a [illegible] stick, he carried a sheaf of peacock feathers.

On the third day the ceremony reached its climax. A [illegible] shriek asserted [illegible] dancers dressed as devils brandishing swords, they cast their spells on the assembly.

Suddenly [illegible] of people stricken [illegible] and rushed screaming for the tower gate. Chased by the [illegible], the [illegible] sacrificial arrow into a small clay offering representing one of the evil dancers. The crowd cheered as the arrow hit its mark, and away ran one of the demon dancers. The operation was repeated with sling and stone, and another demon fled. Then [illegible] men with old muzzle-loading muskets fired at the third offering, and the last of the demons disappeared.

Slicing a Room With a Corpse

Until I left Mustang, I could have chosen from quite a variety of funeral services. For [illegible] Tibetan Buddhist [illegible] I could either have been cremated, thrown into a river, buried, or I might have been chopped up into small squares and fed to the vultures, thus disappearing into the air. In this case, my [illegible] human body is to be used to return to the four elements of which it is composed: fire, water, earth and air.

Further, [illegible] wishes—depending on the dead. Mustang adds a fifth method reserved for a man who dies by strangulation or his grandsons. His body is preserved in salt and then placed in the walls of his house. When finally, in the third generation or second, a child is born, the dead body is taken out at night and secretly carried to a nearby hill, where the corpse is "transferred" to the evil demons around it, as [illegible] long ago to the people in more [illegible].

To my [illegible], I learned one [illegible] body lay within the walls. The private chapel in which I had been sleeping as the honored guest of a noble family in Le Mustang

[illegible]

[illegible] Nevertheless, only the [illegible] between Tibet and Nepal [illegible] Mustang [illegible] The [illegible] to the salt [illegible] Tibetan [illegible] panes. They transported this precious merchandise [illegible] Pokhara to Nepal where the [illegible]

[illegible] day [illegible]

Having no time to hole, I did not care to [illegible] questions I asked. "How [illegible] them came his name ret[illegible] [illegible] proofs of Mustang [illegible]

[illegible]

[illegible] traveled lady, her [illegible] Mustang [illegible]

[illegible] silver [illegible] gold [illegible] [illegible] day we were lucky enough to [illegible] into a [illegible] of the [illegible] of Mustang from the 1960s to the present day. [illegible] proved that the [illegible] in the past Mustang [illegible]

[illegible] towns and [illegible] support the written evidence. Mustang has [illegible] played a significant point [illegible] past, particularly [illegible] the Tibetan-Nepalese war of the 1850's when [illegible] peace negotiations, the king had been [illegible] here [illegible] from the Mu[illegible] [illegible] one from the Nepalese Ma[illegible] [illegible] the Dalai Lama. [illegible] wears three feathers in his arrangement ceremonial [illegible]

So high are barren is this land that not a single tree grows within its wind-swept [illegible] The [illegible] few trees grow [illegible] streams or irrigated [illegible] where [illegible] red like flowers for the [illegible]

At first I was amazed that [illegible] arrive in such high and desolate [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] ask far beneath their dignity. Turquoise however is [illegible] sought.

[illegible] the high [illegible] and deep gorges held a treasure far more valuable than [illegible]. There I found a portfolio of man-made cave [illegible] carved into the near-inaccessible cliff [illegible] pages 506-7). Who had lived there and why I could not tell. To reach these rock towns one had as many as [illegible] steps from one side [illegible] would require intricate cliff-climbing equipment. In all I counted 20 such [illegible] each with more than [illegible] units. One day I hope to solve the [illegible] these mysterious cave [illegible].

I had been in [illegible] for four weeks when I [illegible] brought [illegible] news: "[illegible] fire is out [illegible]." Next day on foot I [illegible] the palace again. Contrary to my [illegible] I was well received. The [illegible] readily answered [illegible] my questions.

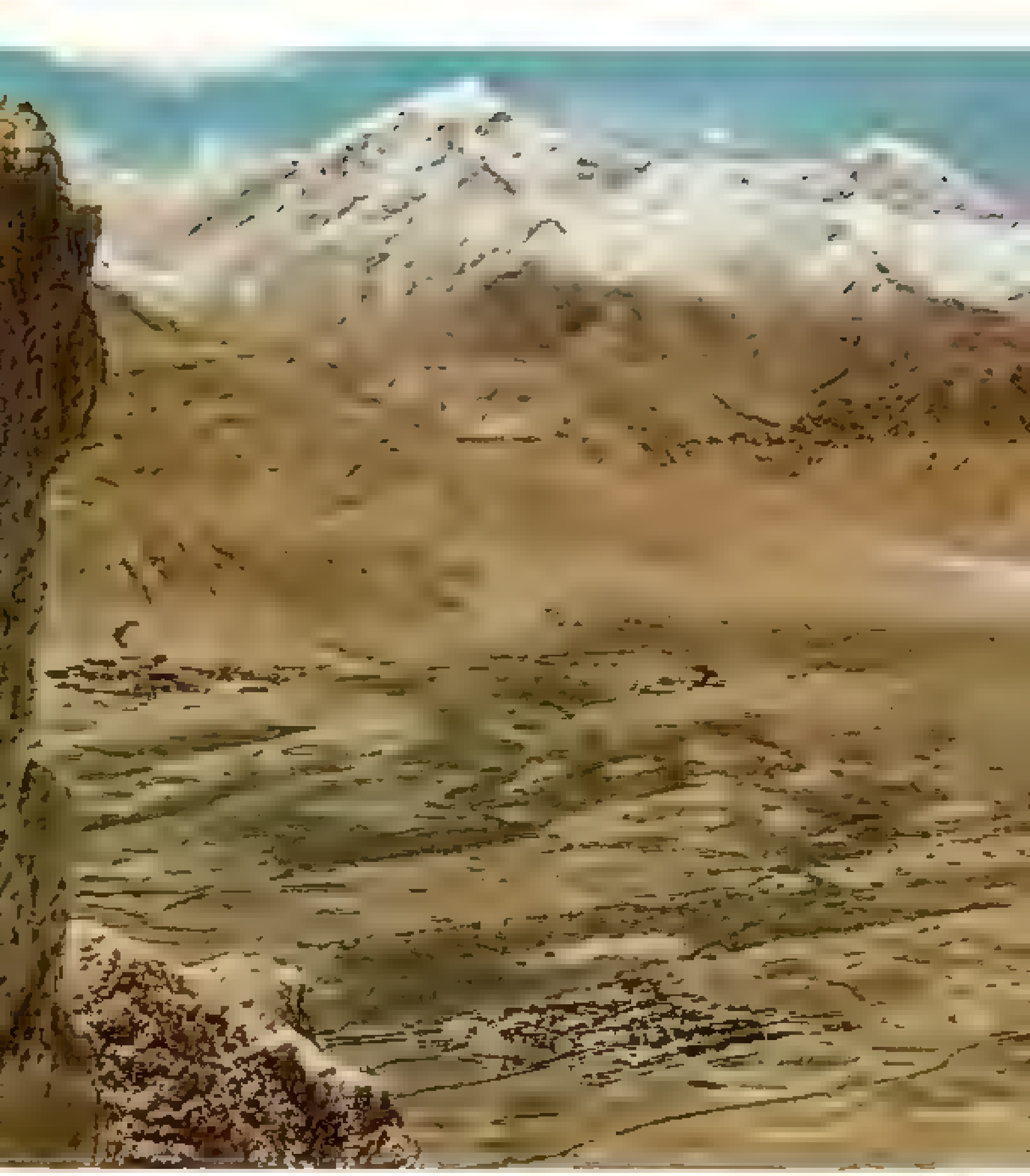
While [illegible] talking a servant tiptoed [illegible] and [illegible] with [illegible] tea. Made [illegible] leaves and [illegible] with an [illegible] [illegible] Indian tea is [illegible] a kind of soup. A royal host even had a raw egg put into the tea to please me. Attempts [illegible] which approval, I kept gulping the strange liquid from my never-empty cup.

Everybody Works for the King

The king [illegible] and out is not alone in all matters of his domain. Dukes and [illegible] [illegible] assist in the task. Every tax levy on Nepal was a particular duty to perform. [illegible] peasants operate [illegible] standing at the k[illegible] [illegible] belonging from town to town [illegible] must prove their kind will. Far [illegible] and [illegible] attached to the k[illegible] and who cannot own private property [illegible].

Scrubbing the stone [illegible] before the king's [illegible] Nepal for [illegible] buckwheat. They work [illegible] a beam of [illegible]—a dispenser of water and [illegible]. These girls [illegible]

Secret Notes Lets Dance



A new name was [illegible] of Kuntaphalar Mountain [illegible] rather more poetic than [illegible] Longpense."

[illegible] silver cups some twirled [illegible] others turned prayer wheels.

[illegible] members in calm deliberation [illegible] crimes and offenses in Mustang [illegible] five a village court, sur[illegible] "wise man" or [illegible] be [illegible]

As an [illegible] honor, the topplace [illegible] king's court as "the golden [illegible] es to a dispute [illegible] heavy fines to be [illegible]

In Tsarang I inquired as to the fate of [illegible] a small dark room. There I saw great [illegible]

[illegible]

[illegible]

[illegible]

[illegible] The [illegible]

[illegible] shortness [illegible]

[illegible] he said, [illegible] we do [illegible]

Several Husbands For One Wife

[illegible] Men and women [illegible] are the [illegible] of [illegible] prepared. When [illegible] good or a [illegible] was

[illegible] now [illegible] corner of the [illegible]

Hazard Sheets in tribesmen in Lhoer a rock. Concealed in holds [illegible] are shown at be shrouds for bodies. Skins of Mustang's people, however, [illegible] ment thus provided [illegible] within Lo Manthang's walls, remaining a cold upper

[illegible] the abdomen. I had even started to [illegible]

[illegible] no bar, not [illegible] a bath since I arrived [illegible] the King. I [illegible] that [illegible] myself possessed many [illegible] lama [illegible] dishes. When I [illegible] the lama [illegible]

I am sure [illegible] but [illegible] to [illegible] I never [illegible] to tell him that in France we even eat snails, frogs, and sometimes horse meat.

[illegible] was [illegible] at [illegible] even [illegible] when I [illegible] and [illegible] and [illegible] and sheep eaten by much of the poor [illegible] but never by monks. These sheets [illegible] marked as [illegible] are not allowed to [illegible]

When a member of these lower orders enters a [illegible] he must [illegible] a [illegible] sleeve before his mouth.

The last of my stores gone, I prepared to [illegible] Nepal. I knew that beyond the great Himalayan range to the south the monsoon [illegible] heavy rains. In spite of [illegible] King [illegible] I [illegible] down the deep gorges of the Kali Gandaki toward the lowlands of Nepal and the [illegible] world.

The day I set out, the Tsarang lama gave me as a present a small [illegible] to [illegible] "Take this to your country," he said.

[illegible] that [illegible] boat [illegible] strange [illegible]

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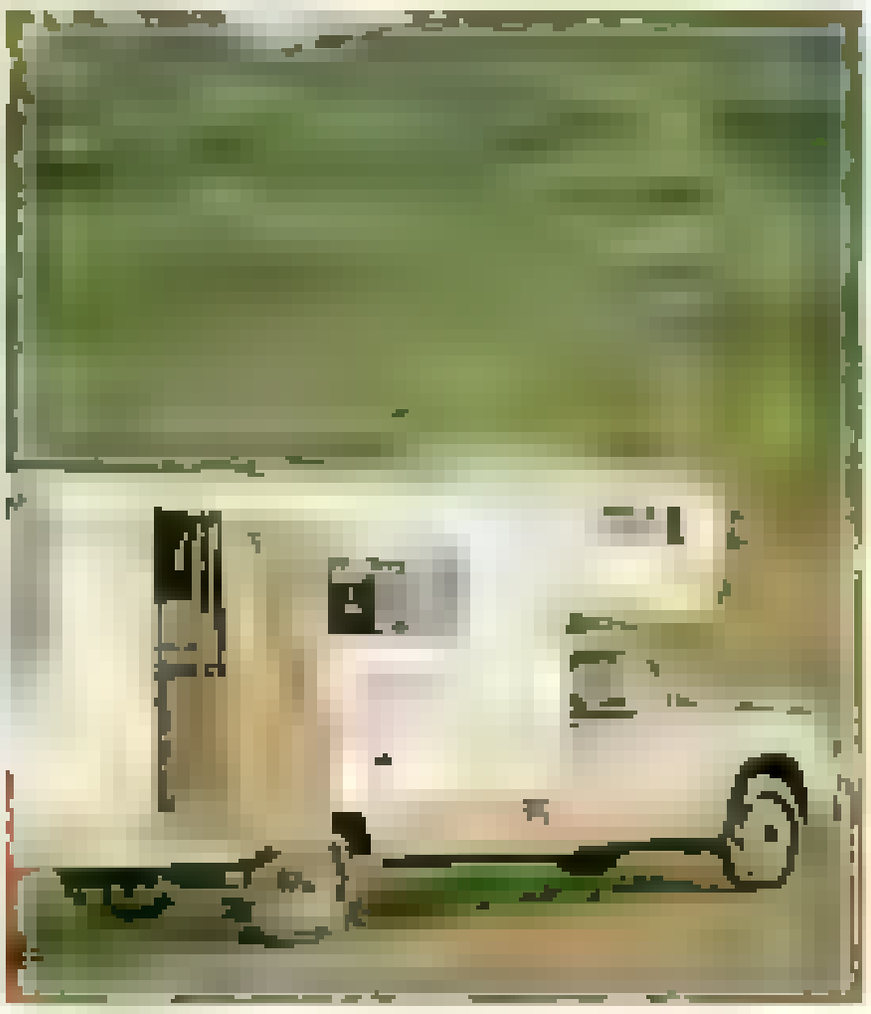

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During her nearly half century of service, Miss M[illegible] [illegible]

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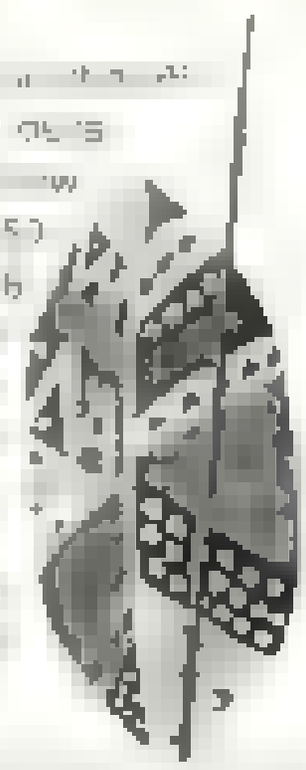

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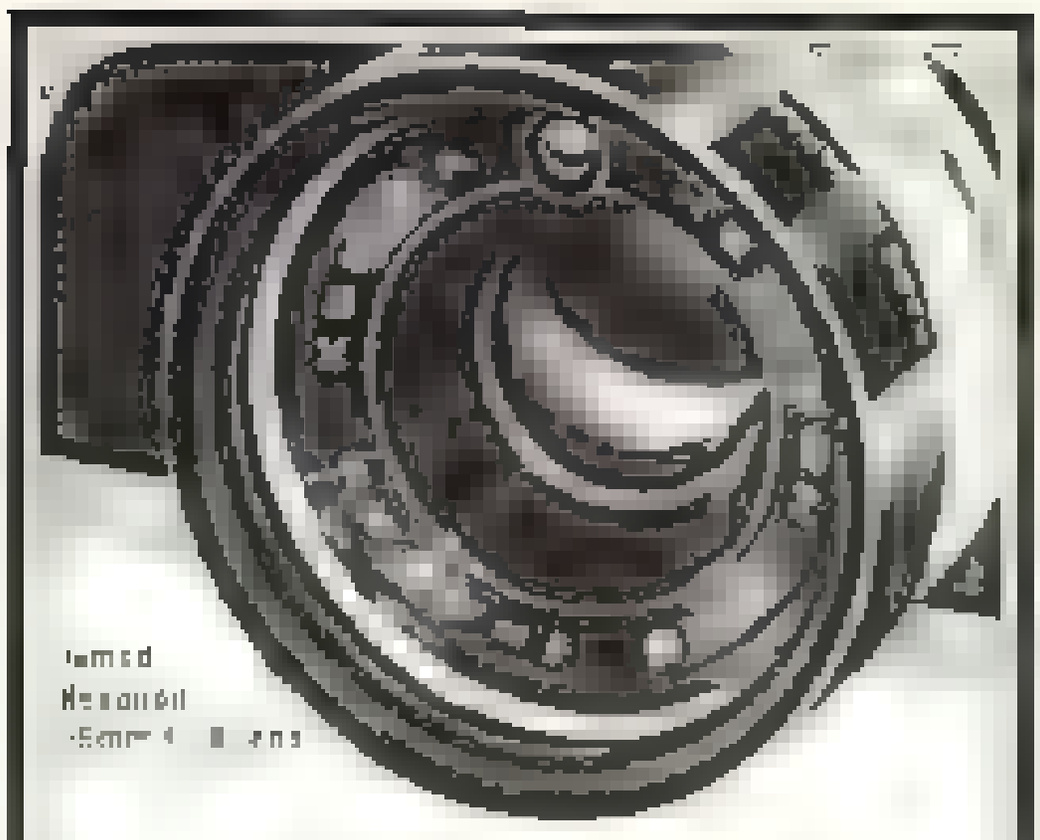

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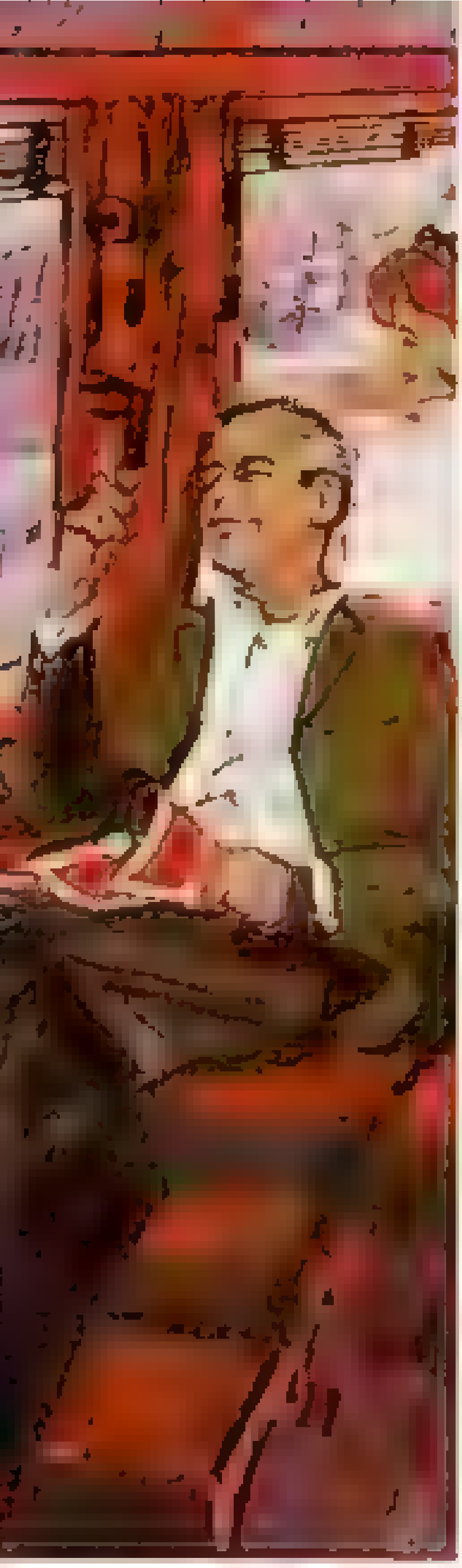

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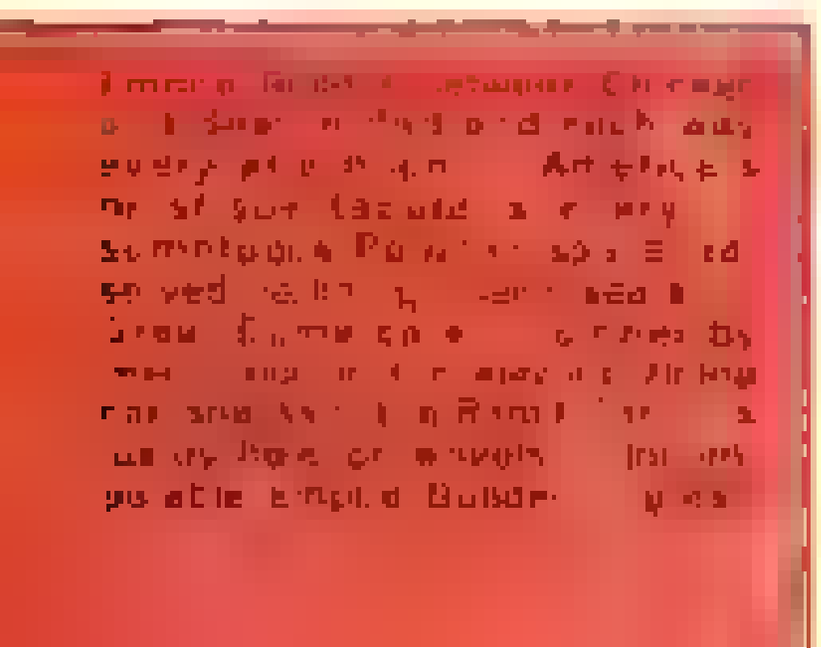
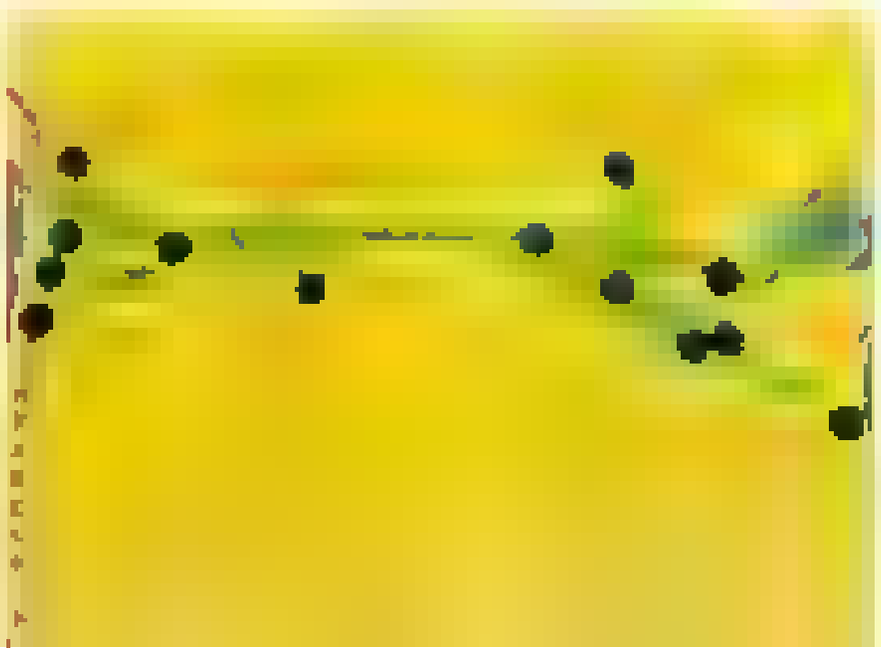
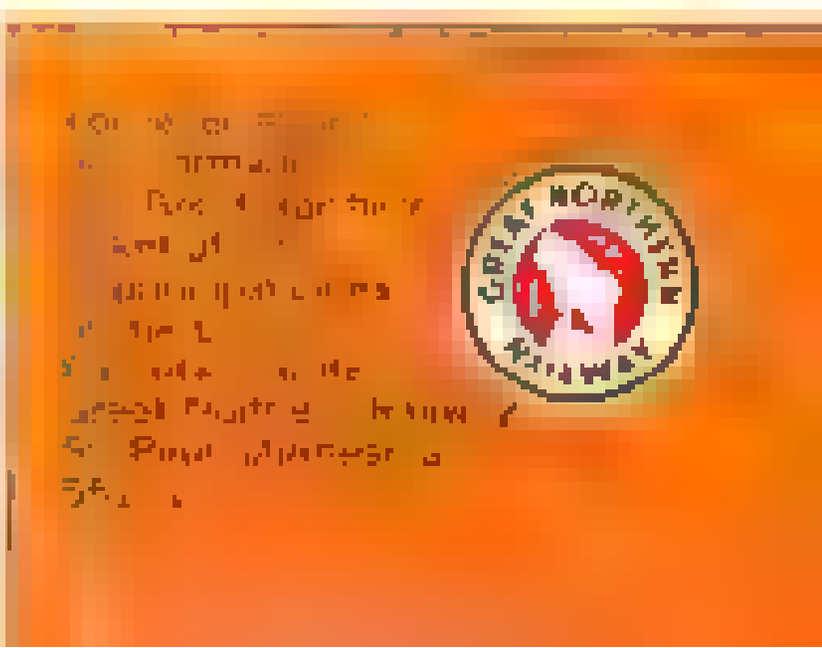
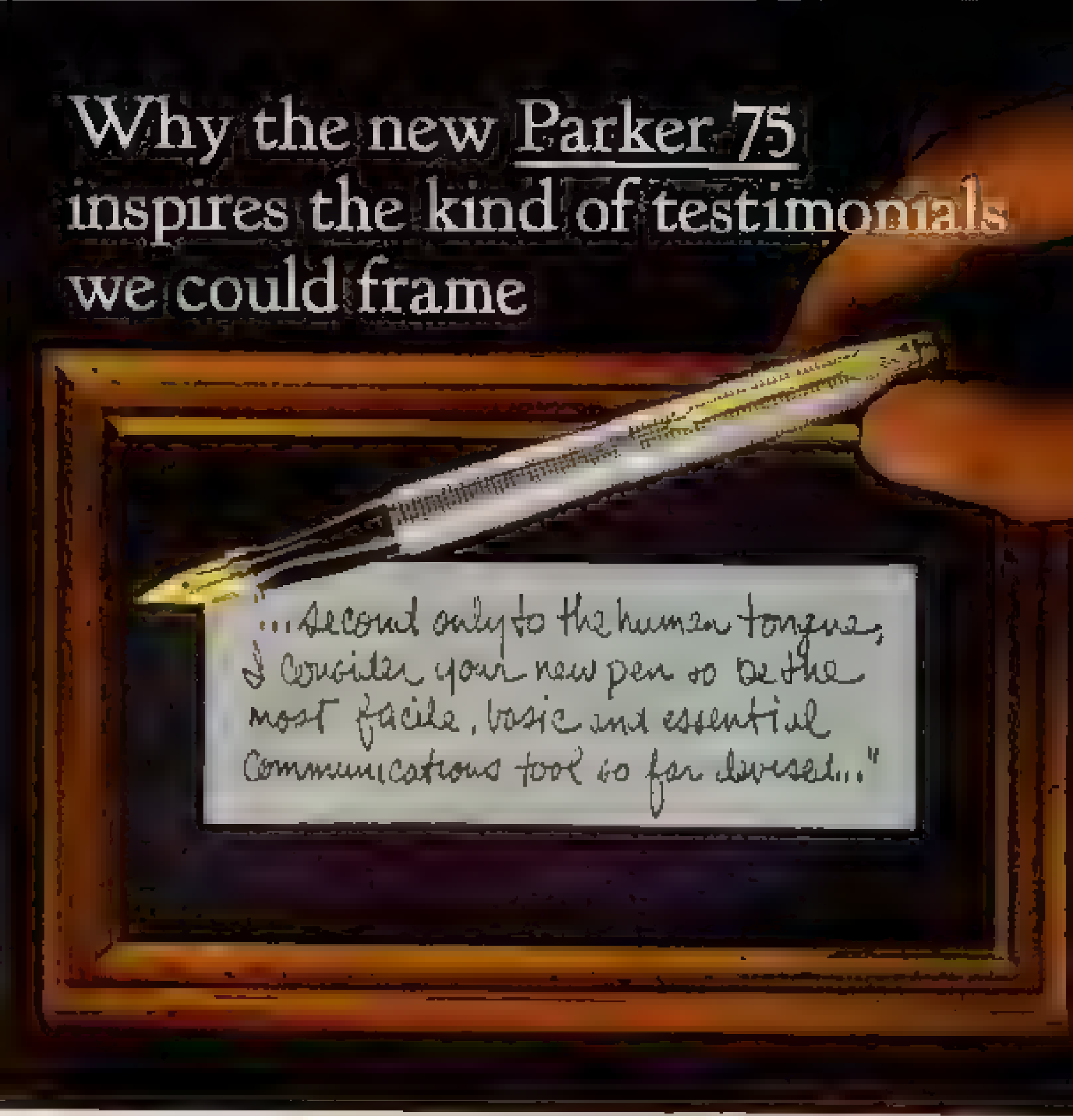






Why the new Parker 75 inspires the kind of testimonials we could frame



PARKER

You needn't be a professional to play it. But you're apt to sound like one.

[illegible] the way to buy a Hammond Organ

Music's most [illegible] voice

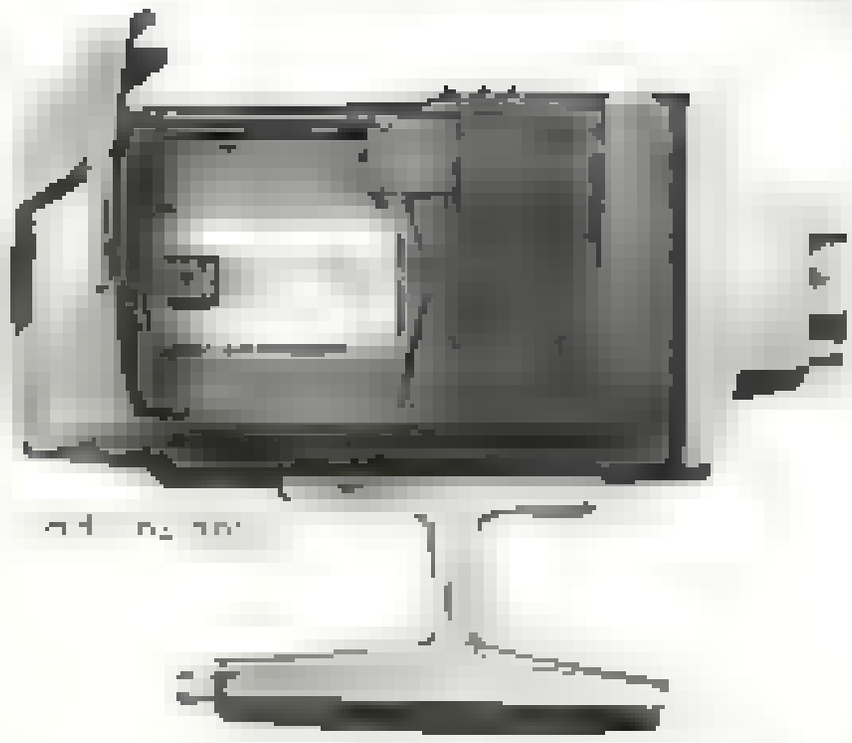
HAMMOND ORGAN

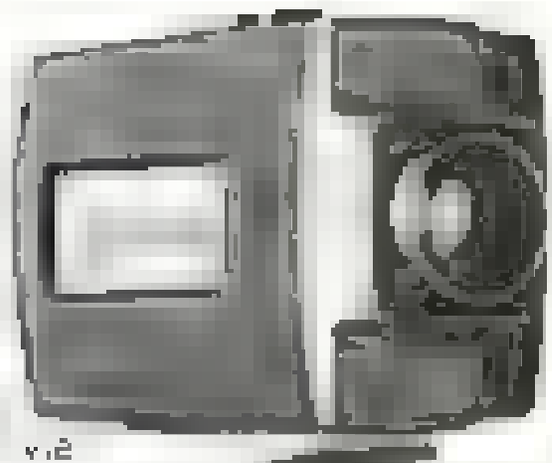
Also makers of the Hammond Piano

We thought we knew it all. Then we discovered Machu Picchu.

PANAGRA • PAN AM

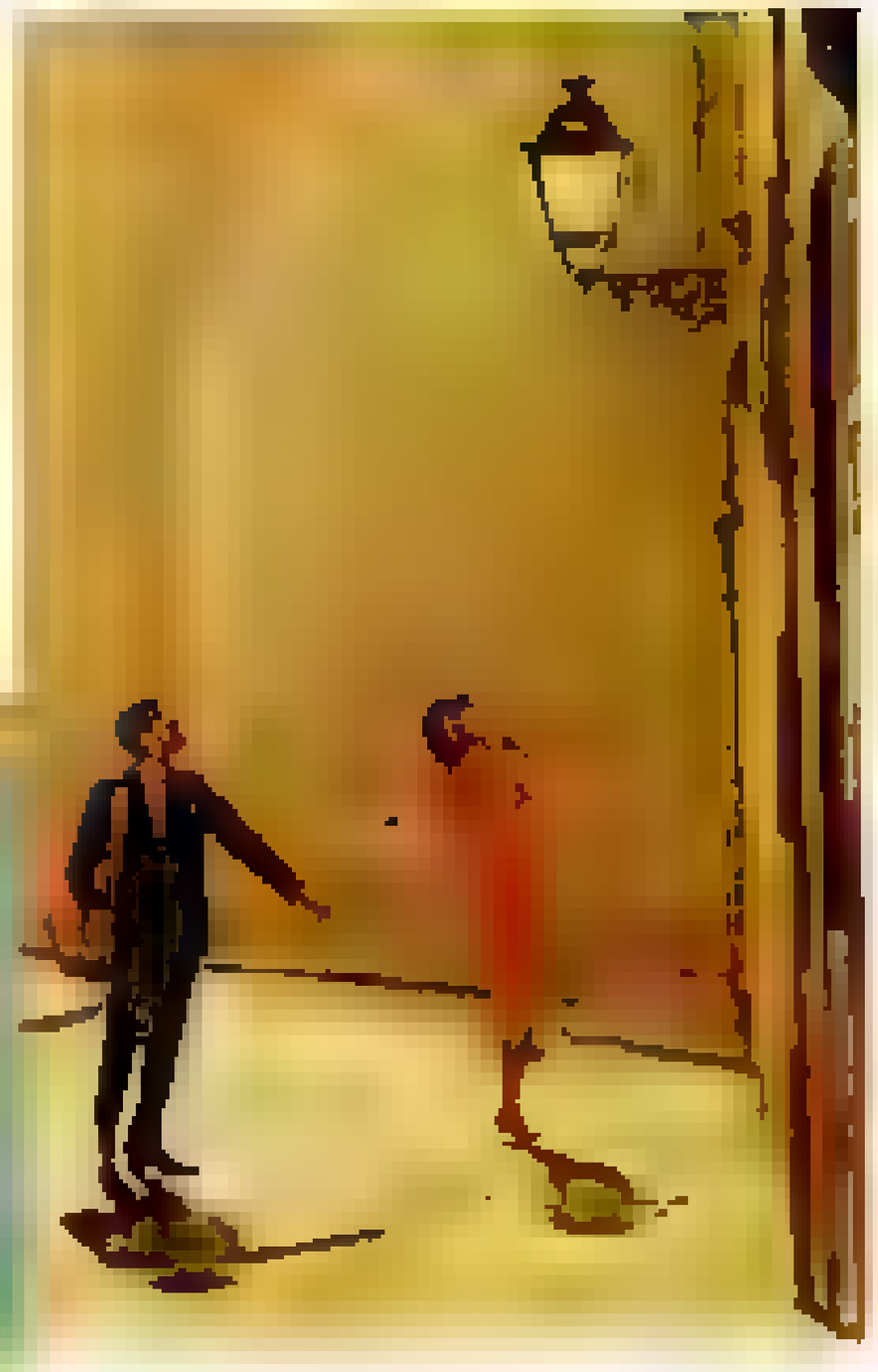
Over a year ago, Bell & Howell received a mysterious black box from Eastman Kodak.

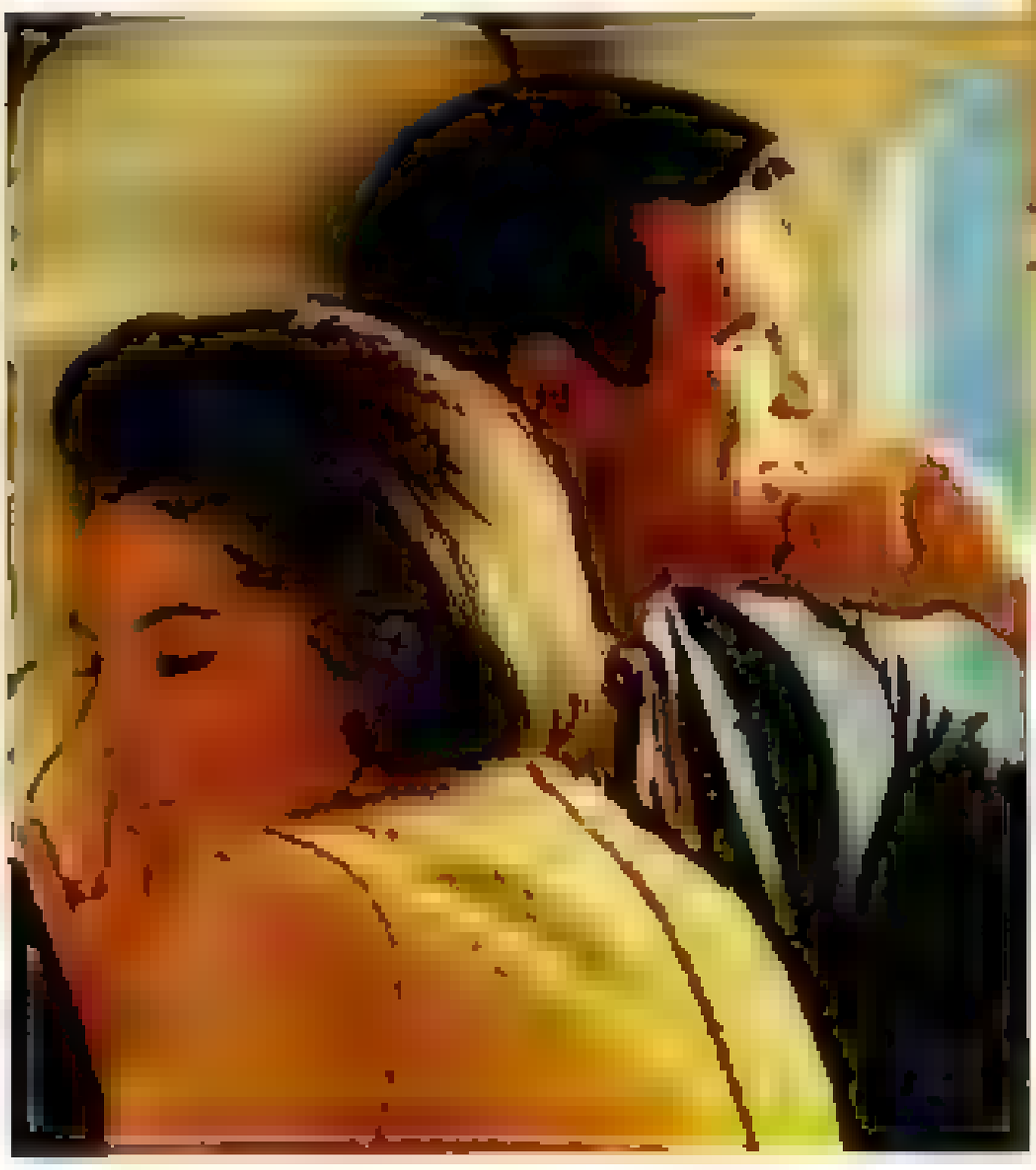




Bell & Howell

How do you get to Spain and Europe?





Relaxed

...on Iberia, where only the p ane gets more attent on than you

[illegible]

[illegible]

[illegible]

[illegible]

IBERIA
AIR LINES OF SPAIN

Only Magnavox gives you Magna-Color with Astro-Sonic Stereo — the greatest advancements in home entertainment.

[illegible] Magna-Color [illegible] gives you [illegible] these exclusive benefits that make [illegible] Magna-Color [illegible] your natural color [illegible] Automatic Color [illegible] Constant Color [illegible] pictures true Chromatone [illegible] warm beauty to [illegible] Quick Pictures [illegible]

Astro-Sonic [illegible] the most beautiful music you have [illegible] FM/AM [illegible] Completely eliminates pitch distortions. The pick-up [illegible]

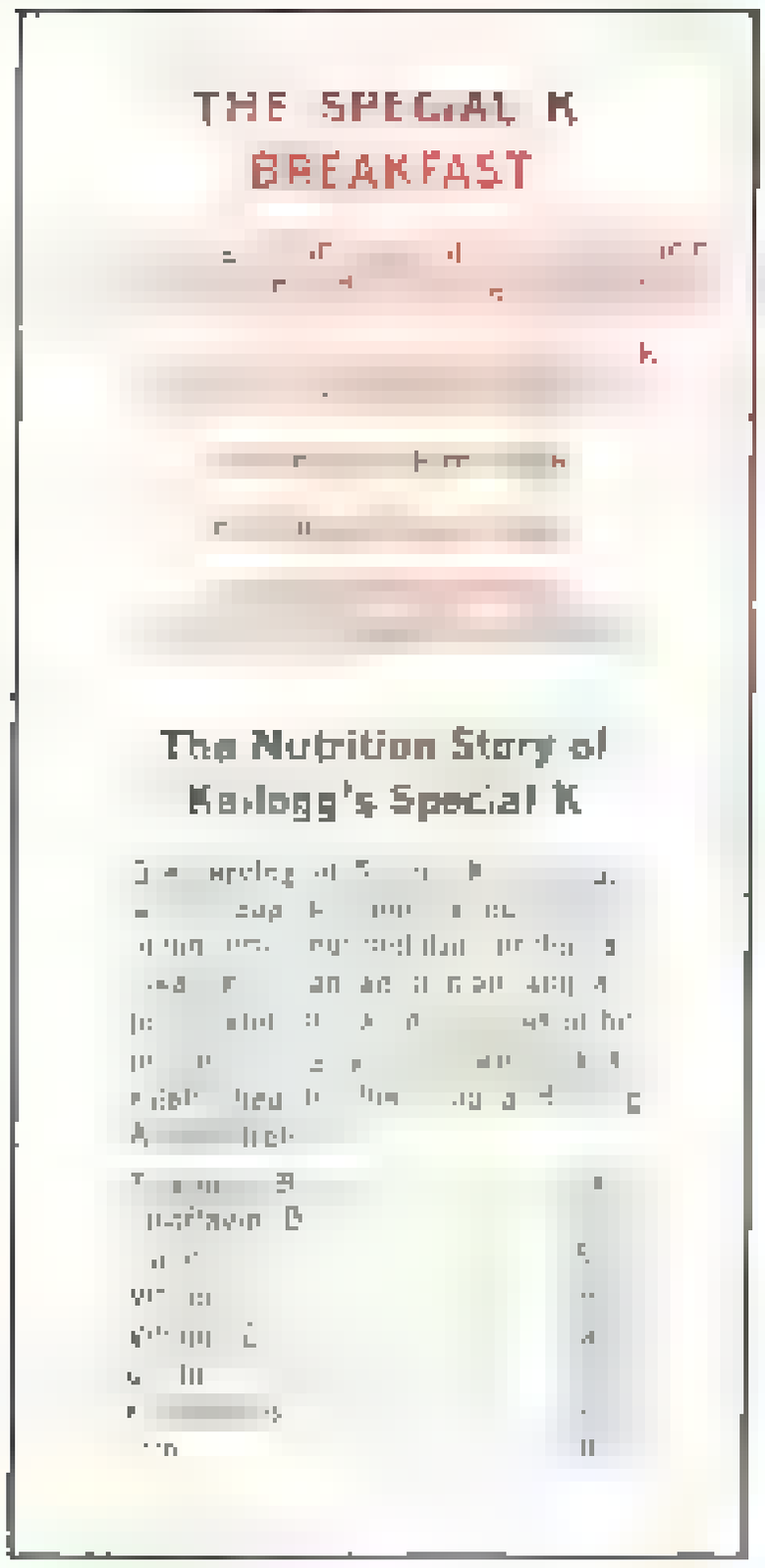
the magnificent

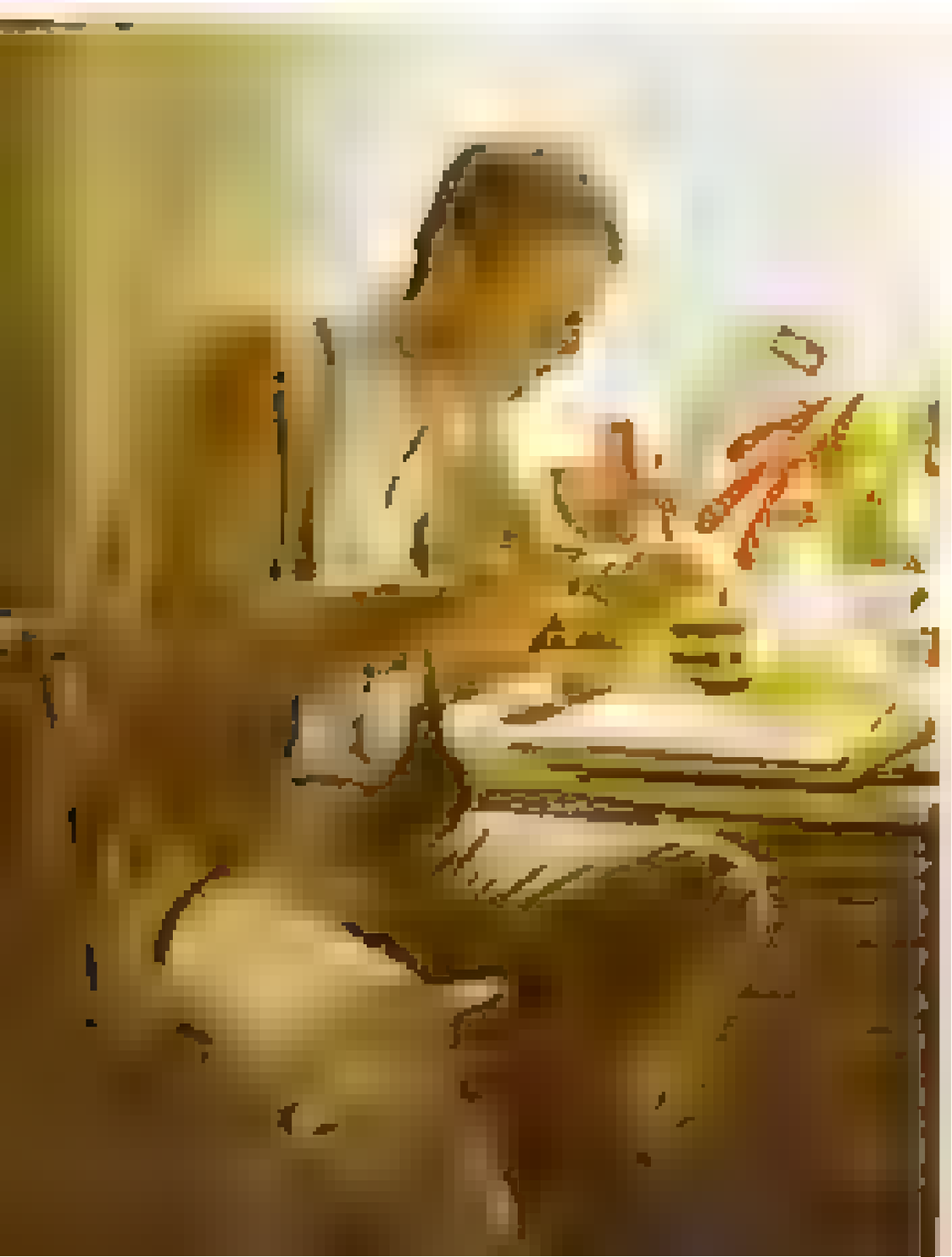
Magnavox

[illegible] Park Ave. New York 17, N.Y.

Having trouble with weight control?

The Special K Breakfast is for you. Only 240 calories. Good [illegible] protein. 99% fat-free. Tastes fine, day after day





This is the weight control breakfast you can live with, month after month.

Glance again at the picture. Appetizing, isn't it? The Special K Breakfast is a normal, natural meal.

And in spite of its modest calorie count, it starts your day with a heaping helping of nourishment. Complete quality protein. Important vitamins and minerals. And energy to get you going.

A sensibly nutritious breakfast like this can encourage you to eat sensibly at lunch and dinner.

Key to the success of the Special K Breakfast is a uniquely delicious cereal: Kellogg's Special K. Besides being exceptionally high in protein and low in fat, it has a flavor you'll relish every time you sit down to it.

Kellogg's Special K has become an important part of breakfast with millions of people.

Don't you think it deserves a place on your table?

Kellogg's SPECIAL K

Now the most automatic of cameras does even more for you

KODAK INSTAMATIC 804 Camera

EASTMAN KODAK COMPANY, ROCHESTER, N.Y.

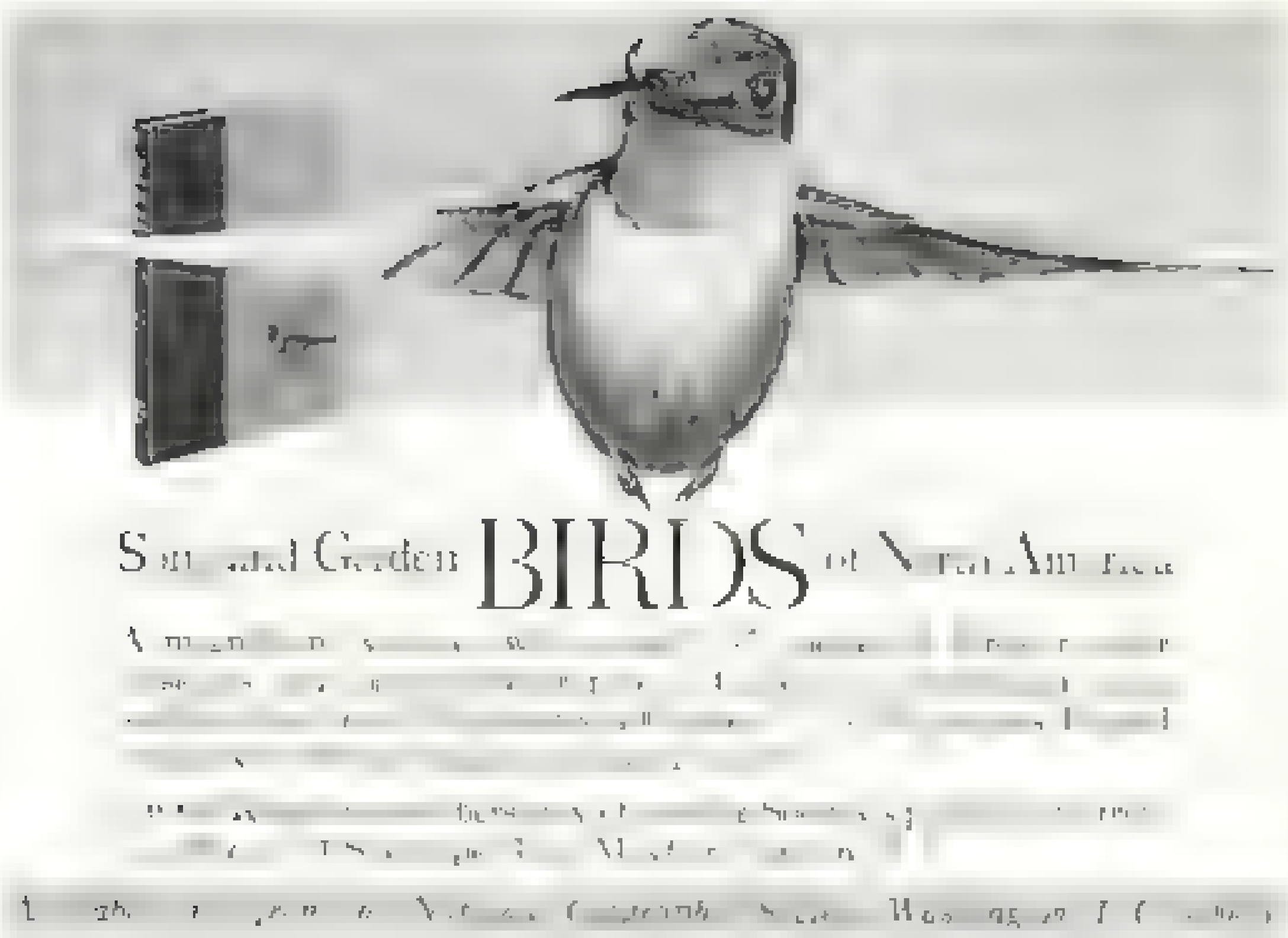
Use our handy time machine.

[illegible]

[illegible]

[illegible]

BOEING JETS



Get up to $750 a month tax-free when you're sick or hurt...

with Equitable Living Income Insurance

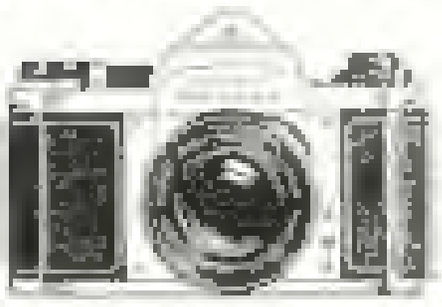
LIVING INSURANCE FROM EQUITABLE

That's my girl!

After looking at my snapshots of Ellie practicing for the championships, a friend told me the only way to take satisfactory personal pictures of sporting events is with a camera such as his Honeywell Pentax.

I asked him to prove it, and he did with this shot, taken from the fence with a 135mm lens on his Honeywell Pentax. It's the kind of picture I've been trying to get all along. He showed me how the single-lens reflex viewing system works—how you compose and focus through the same lens that takes the picture. And, he showed me how the necessary 135mm telephoto lens allowed him to stand back far enough to avoid distracting Ellie and her mount.

I was convinced. And when I compared the Honeywell Pentax H3v with other fine cameras, I saw that it was the camera for me. With the championships coming up next week, I'm equipped to take those pictures I've always wanted!



Four models of the famous Honeywell Pentax camera are available, with prices starting at $149.50. The complete Honeywell Pentax system, including seventeen superb fully interchangeable lenses and a wide selection of useful accessories, awaits you at your nearest Authorized Honeywell Pentax Dealer's. Visit him soon, or send the coupon below for full-color literature.

HONEYWELL (Mail Station 209) Denver, Colo. 80217
Please send literature on Honeywell Pentax cameras, and accessories to: 6-18

NAME _____

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Honeywell
PHOTOGRAPHIC

On June 3, 1875, Alexander Graham Bell first transmitted recognizable voice sounds on this ingenious instrument. It employed a tightly stretched membrane, called "goldbeater's skin," which was sensitive to sound waves.

90 years of telephone progress toward better, faster service!

This year, 1965, the area-by-area introduction of fast, convenient Touch-Tone® phoning is well under way. Modern push buttons speed calling and open up many new uses for your phone. For example, you may be able to shop by phone just by touching buttons to identify the merchandise you want—or pay bills through your bank the same way.

The 90 years between these two models have seen literally thousands of telephone designs developed. And behind them all has been a relentless search for new methods and materials that would carry the human voice farther, faster, more clearly—and as free from trouble as humanly possible. That's why your telephone and your telephone service will always keep changing—for the better.

Bell System
American Telephone and Telegraph
and Associated Companies